1938-1939

CATALOG

BULLETIN OF THE STOUT INSTITUTE

MENOMONIE » » » WISCONSIN

2/13

ANNUAL CATALOG

THE STOUT INSTITUTE

ANNOUNCEMENT
THIRTY-SIXTH YEAR
1938-1939

GENERAL INFORMATION AND
COURSES OF STUDY FOR THE SCHOOL YEAR

Entered as second-class matter March 10, 1927 at the Post office
at Menomonie, Wis., under the act of August 12, 1914

Table of Contents

Page 5

Board of Regents 6
College Calender 7
Officers of Administration 9
Faculty 16
General Information--Historical 20
Building and Grounds 21
Dormitories 24
Infirmary 25
Cafeteria and Tea Room 26
Admission 28
Transferred Credits 29
Credits, Grade Points, and Attendance 30
Residence Requirements 30
Degrees 31
Transfers 31
Expenses 32
Tuition and Fees 33
Scholarships and Awards 34
Self-Support and Student Aid 35
Fee for School Activities 36
Refunds 37
Summer Session Information 38
Graduate Program 42
Courses of Study--Industrial Education 53
Courses of Study--Home Economics 60
Liberal Arts 60
Education and Psychology 66
English 69
Mathematics 70
Music 72
Physical Education and Coaching 75
Physical Sciences 78
Social Sciences 81
Home Economics 81
Art 83
Foods and Nutrition

Clothing and Textiles 86
Family Life 88
Industrial Education 90
Shop Work, Drawing and Design 90
Drawing 90
Electrical Work 94
General Mechanics 94
Metal Work 95
Printing 99
Woodwork 101
Building Construction 109
Student Roster .....
Index .....

Board Of Regents

February 1, 1938

* * * * *

John Callahan	Madison
Mrs. Charles H. Crownhart	Madison
Mrs. Wilson Cunningham	Platteville
Clarence Erlanson	Superior
Edward J. Dempsey	Oshkosh
Jay H. Grimm	River Falls
Peter J. Smith	Eau Claire
George H. Martens	Stevens Point
Mrs. Beatrice Corr	Milwaukee
W. L. Seymour	Whitewater
A. W. Zeratsky	La Crosse

OFFICERS OF THE BOARD

Edward J. Dempsey, President

Edgar G. Doudna, Secretary

College Calendar

FOR THE THIRTY-SIXTH ANNUAL SESSION
OF
THE STOUT INSTITUTE

* * * * *

SECOND SEMESTER 1937-38

Monday, January 31, Registration Day for Second Semester.
Tuesday, February 1, Second Semester classes convene.
Sunday, May 29, Baccalaureate Address.
Friday, June 3, Commencement Day.

SUMMER SESSION 1938

Monday, June 27, Thirty-third Summer Session begins.
Friday, August 5, Summer Session closes.

REGULAR SESSION 1938-39

Monday, Sept. 12, Regular Session begins. Registration for Freshmen and other new students.
Tuesday, Sept. 13, Completion of registration for Freshmen and other new students.
Wednesday, Sept. 14, Registration for matriculated students.
Thursday, Sept. 15, Classes convene.
Thursday, Nov. 24, Thanksgiving Recess.
Monday, Nov. 28, Classes resume.
Friday, Dec. 16, Christmas Vacation begins.
Monday, Jan. 2, 1939, Classes resume.
Friday, Jan. 27, First Semester Ends.
Monday, Jan. 30, Registration Day for second semester.
Tuesday, Jan. 31, Classes convene.
Sunday, May 28, Baccalaureate Address.
Friday, June 2, Commencement Day.

Officers of Administration

* * * * *

BURTON EDSAL NELSON, President.
CLYDE A. BOWMAN, Dean, Division of Industrial Education. Director of Summer Session.
RUTH E. MICHAELS, Dean, Division of Home Economics. Dean of Women.
J. ERLE GRINNELL, Director, Department of Liberal Arts.
GERTRUDE M. O'BRIEN, Registrar.
MERLE M. PRICE, Dean of Men.
MARGARET E. SANTEE, Executive Secretary.
BRYARD M. FUNK, Business Manager.
RUDOLPH ROEN, Superintendent of Buildings.
JOSEPH T. BURNS, Chief Engineer.
THERESA STOLEN, College Nurse.
DR. JULIUS BLOM, College Physician
GRACE M. DOW, Director of Halls and Housing, Hostess of Tainter Hall.
FREDA M. BACHMANN, Hostess of Tainter Annex.
HAROLD R. COOKE, Head, Lynwood Hall.

* * * * *

LILLIAN M. FROGGATT, Librarian.
ROBERT BRUCE ANTRIM, Assistant Librarian.
MYRTLE STRAND, Assistant Librarian. (on leave)
EMMA BRYAN, Assistant Librarian.

* * * * *

MINNIE J. BECKER, Office Assistant - Stenographer.
LARMON PRICE, Office Assistant - Stenographer.
AGNES WINSTON, Office Assistant - Stenographer.

Faculty

* * * * *

BURTON EDSAL NELSON, President.
Pennsylvania State Normal School, 1884; Western Normal College, B. S., 1891; M. S., 1895; High School Principal four years; Superintendent City Schools, Lewistown, Illinois, seven years; Superintendent City Schools, Lincoln, Illinois, four years; Superintendent City Schools, Racine, Wisconsin, fourteen years; President, The Stout Institute, 1923—

GEORGIA H. ABER, Home Economics Education.
The Stout Institute, B. S., 1931; Graduate Work, The Stout Institute, Summer Sessions, 1935, 1936, 1937; Teacher Home Economics, Chetek, Wis. High School, 1931-32; Racine, Wisconsin, 1932-37; The Stout Institute, 1937—

KETURAH ANTRIM, Physical Education.
Lake Forest University, Lake Forest, Illinois, B. A. 1923; University of Wisconsin, Ph. M., 1932; Cornell Community High School, two years; Pontiac Township High School, five years; Assistant, University of Wisconsin, 1931-32; Lynchburg College, Lynchburg, Virginia, two years; La Crosse, Wisconsin, High School, 1934-36; The Stout Institute, 1936—

FREDA M. BACHMANN, Biological Science.
Miami University, Oxford, Ohio, 1907, A. B.; 1908, M. A., University of Wisconsin, Fellow in Botany 1908-1909; Assistant in Botany and Plant Pathology 1909-1912, Ph. D.; Milwaukee Downer College, Asst. Prof. Botany and Bacteriology, 1912-24; University of Wisconsin, Instructor in Agricultural Bacteriology, 1914-24; The Stout Institute, 1924—

WILLIAM R. BAKER, Printing.
Northern Illinois Teachers College, graduate 1913; Illinois Normal University, 1914; Merganthaler Linotype School, 1920; Iowa State College, 1922-1923; The Stout Institute, B. S., 1925; U. of Minn., M. A., 1936; Teaching, Fairbury, Ill., 1913-1915; Rockford, Ill., 1915-1919; Shop Supt. Sioux City, Ia., 1919-26; Waukegan, Ill., 1925-1933; The Stout Institute, 1933—

CLYDE A. BOWMAN, Industrial Education.
River Falls, Wis., State Normal, Diploma 1907; Stout Institute Diploma, 1909; Columbia University Bachelor of Science, 1915; Graduate work, Columbia University, 1916, 1919; University of Wisconsin, M. S., 1927; Graduate work at University of Wisconsin, second semester, 1934-35, 1935-36; Director of Manual Arts, Stillwater, Minn., 1909-1911; Director Department Manual Arts, State Normal, Stevens Point, Wisconsin, 1911-1916; Instructor in Industrial Arts, Columbia University, 1916-1919; The Stout Institute, 1919—

ARTHUR G. BROWN, Education.

Macalaster College, 1914, B. S.; Stout Institute, 1914; University of Wisconsin, 1928, M. S.; Part-time, University of Minnesota, 1931-36; Instructor of Manual Arts, Le Sueur, Minn., two years; Head of Department of Manual Arts, Forestry State Normal School, Bottineau, North Dakota, four years; The Stout Institute, 1920—

MARY LOUISE BUCHANAN, Foods.

Iowa State College, Ames, Ia., B. S. 1915; M. S. 1927; Teacher of Foods, Cedar Rapids, Iowa, 1915-1921; Teacher of Foods, Omaha, Nebraska, 1921-1926; The Stout Institute, 1927—

GERTRUDE L. CALLAHAN, English.

State Normal School, Oshkosh, 1910; University of Chicago, Ph. B., 1912; University of Wisconsin, Ph. M., 1927; Teacher of English in Waupun, Wisconsin, 1913-1915; Teacher of English, Jamestown, North Dakota, 1916-1918; Milwaukee, 1920-1922; Madison, 1923-1925; Instructor in English, University of Wisconsin, 1919-1920; 1925-1927; The Stout Institute, 1927—

LILLIAN CARSON, Related Arts.

Earlham College, Richmond, Indiana; University of Chicago, Ph. B., 1919 and M. S. 1926; Instructor and Supervisor of Home Economics, Newcastle, Indiana, 1915-1918; Instructor, Related Arts, Oklahoma Agricultural and Mechanical College, Stillwater, Oklahoma, 1919-1921; Assistant Professor of Home Economics, Lewis Institute, Chicago, 1921-1925; The Stout Institute, 1927—

HAROLD R. COOKE, Director of Music.

New England Conservatory of Music, Boston, Mass., 1925; Cello, composition, and operatic interpretation with Doctors Klein and Buxbaum, Vienna, 1926 and 1927; University of Minnesota, 1932; Bachelor of Music, Minneapolis College of Music, 1933. Director of Music or of musical organizations in Rochester, Winona, Austin, Minn., and Boston, Mass.; The Stout Institute, 1934—

WALTER C. CRAWFORD, Physical Education, Coaching.

University of Illinois, B. S., 1928; Head Football and Baseball Coach and Assistant Basketball Coach, San Jose State College, San Jose, Cal., 1928-32; Freshmen Football Coach, University of Miami, Miami, Fla., 1933-34; The Stout Institute, 1935—

MARGARET WINNONA CRUISE, Nutrition.

University of Toronto, B. A., 1912; Columbia University, M. A., 1918; Graduate Study at University of Chicago, 1926-27; Teacher in Public Schools, Port Dover, Ontario, 1905-1907; Dietitian, Johns Hopkins Hospital, 1912-1913; Mount Allison College, Sackville, N. B., 1913-1915; University of Toronto, 1915-1917; Oregon State College, 1918-1920; MacDonald College, McGill University, 1921-1926; The Stout Institute, 1927—

FRED L. CURRAN, Supervisor of Practice Teaching.

State Normal School, Stevens Point, Wisconsin, 1905; The Stout Institute, Diploma, 1908; B. S. 1921; Teacher in Public Schools, 1898-1903; Principal, State Graded Schools, 1905-1907; University of Minnesota, M. A., 1934; The Stout Institute, 1908—

JOHN MURDOCH DAWLEY, Political Science and Economics.

University of Minnesota, B. A. in Liberal Arts, 1926; LL. B. in Law, 1928; M.A. in Political Science and Economics, 1930; Ph.D. in Political Science and Economics, 1932; Teaching Assistant at University of Minnesota, 1929; The Stout Institute, 1932—

HELEN DRULEY, Related Art.

Academy of Fine Arts, Chicago, 1922-24; Minneapolis Art Institute School, 1926; University of Minnesota, B. S., 1932; University of Minnesota, M. S., 1935; River Falls State Teachers College, Supervisor of Art, 1927-29; Mankato State Teachers College, 1929-30; University of Minnesota, Part-time Instructor in Art, 1931-34; The Stout Institute, 1936—

H. F. GOOD, Auto Mechanics, Electrical Work, Science.

Iowa State College, B. S. in Electrical Engineering, 1913; B. S. in Agricultural Engineering, 1914; M. S. in Industrial Education, 1929; Instructor in Agricultural Engineering, Dunn County School of Agriculture, 1914-1918; The Stout Institute, 1918—

DANIEL GREEN, Machine Drafting.

Whitewater, Wisconsin, State Normal, 1900-1902; Mechanical Engineering, University of Wisconsin, 1902-1905; B. S., University of Chicago, 1914; M. A., University of Minnesota, 1932; Instructor and director of shop work and drawings, Des Moines, Iowa; Louisville, Kentucky; Marquette, Michigan, and Elgin, Illinois, 1906-1917; Head, Department of Industrial Education, State Normal School, Macomb, Illinois, 1917-1918; Director of Vocational Education, Richmond, Indiana, 1922 - 24; The Stout Institute, 1924—

JOHN ERLE GRINNELL, English.

University of North Dakota, B. A.; University of Minnesota, M. A. in Education, 1925; Stanford University, Ph. D., 1934; Principal of high school, Cooperstown, N. D., 1921-1923; same, Pine City, Minn., 1923-1924; Head of English Department, Albert Lea, Minn., 1925-1927; Dean of State School of Forestry, Bottineau, N. D., 1927-1930; assistant and instructor, University of Minn., 1930-1931; Stanford University, 1931-1932; The Stout Institute, 1932—

DORIS M. HALE, Physiology, Biology.

Purdue University, B. S. 1934; M. S. 1937. Laboratory technician, Indiana University School of Medicine, 1934-35. Teaching General Biology, Purdue University, 2 years, 1935-37. The Stout Institute, 1938—

H. M. HANSEN, Advanced Woodwork.

The Stout Institute, 1918, Diploma; Forest Products Laboratory, Special Courses, 1920-1923; The Stout Institute, 1927, B. S.; University of Minn., M. A., 1936; Building Trades Experience, 16 years; The Stout Institute, 1912—

ALICE SHERFY HOUSTON, Director of Nursery School.

Lewis Institute, 1906-08; Ohio State University, B. S., 1924; Merrill Palmer School, Detroit, 1930-31; University of Washington, M. S., 1927. Teacher of Nutrition, Slippery Rock, Pennsylvania State Teachers College, 1924-1926; University of Southern California, 1927-1928; U. S. Agricultural College, Logan, Utah, 1928-1929; State Normal School, Bellingham, Washington, 1929-30; The Stout Institute, 1931—

ALMON B. IVES, Speech.

Illinois Wesleyan University, A. B., 1931; Illinois State Normal University, B. Ed., 1932; Northwestern University, M. A., 1936; Teacher, Divernon Township High School, 1932-34; Teacher, Speech, Casey Township High School, 1935-37; The Stout Institute, 1937—

LILLIAN JETER, Clothing and Related Art.

Kansas State Agricultural College, 1916, B. S.; Teachers College, Columbia University, 1925, M. A.; Fremont High School, Fremont, Nebraska, 1916-1919; Head, Home Economics Department, Nebraska Wesleyan University, Lincoln, Nebraska, 1919-1926; Teacher of Clothing and Textiles, Alabama College, Montevedo, Alabama, 1926-27; The Stout Institute, 1927—

DOROTHY JOHNSON, Home Economics Education.

Kirksville, Missouri State Teachers College, B. S., 1928; University of Missouri, A. M., 1933; Memphis, Tennessee, Public Schools, seven years; Chillicothe, Missouri, High School, Home Economics, 1928-31; Boonville High School, Vocational Home Economics, 1932-36; Teacher Trainer For Vocational Homemaking Education, State Board of Vocational and Adult Education, The Stout Institute, 1936—

FLOYD KEITH, General Metals, Sheet Metal.

River Falls Normal, Diploma, advanced course, 1915; The Stout Institute, B. S., 1922; Iowa State College, M. S., 1929; three seasons recreational work, Winnipeg, Canada; five years Instructor in Industrial Work in Wisconsin High Schools; practical experience in the metal trades; The Stout Institute, 1922—

RAY F. KRANZUSCH, Auto Mechanics, and General Mechanics.

The Stout Institute, B. S., 1936; Journeyman Electrical Construction and Repair, Five and One-half Years; Instructor in Electrical Auto Mechanics, and Radio, Sheboygan High School, Sheboygan Vocational School, 1921-1924; The Stout Institute, 1924—

MILDRED L. LAWTON, Home Administration.

Union University, Jackson, Tenn., 1929, B. S.; Iowa State College, Ames, Iowa, 1931, M. S.; Grade Schools, Osceola, Mo., 1924-28; High School Vocational Home Economics, Farmington, N. M., 1929-30; Adviser, Iowa State College, Ames, Iowa 1930-31; The Stout Institute, 1931—

MABEL H. LEEDOM, Chemistry.

City Normal School, Dayton, Ohio, 1894; Stout Institute, Diploma, 1910; Teachers College, Columbia University, B. S., 1919; M. A., 1935; Public Schools, Dayton, Ohio, 1895-1908; The Stout Institute, 1910-1918; 1920—

RUTH M. LUSBY, Foods.

University of Washington, B. S., 1918; Columbia University, M. A., 1920; Graduate work, University of Washington, 1932-33; Dietitian, Swedish Hospital, Seattle, 1918-19; Director, Residences and Dining Halls, University of Washington, 1920-28; Professor and Department Head of Dept. of Institution Management, Iowa State College, 1928-31; The Stout Institute, 1933—

MARY M. McCALMONT, Chemistry.

Westminster College, New Wilmington, Pennsylvania, B. S.; Graduate Student, University of Omaha, Nebraska, 1911; University of Wisconsin, 1911-12, M. S., 1921; Teacher in Public Schools, 1906-1907; Principal of High School and Supervisor of Music, Woodville, Ohio, 1907-1909; City Schools, Omaha, Nebraska, 1909-1911; The Stout Institute, 1912—

RUTH E. MICHAELS, Home Economics Education.

The Stout Institute, Diploma; University of Chicago, Ph. B., 1922; Columbia University, M. A., 1923; Director, Home Economics Department, Teachers College, Cape Girardeau, 1905-11; Assistant Professor, Home Economics Division, Iowa State College, 1911-15; Dean, Home Economics Division, State College, Oklahoma, 1915-21; Assistant Professor, University of Pennsylvania, 1923-27; The Stout Institute, 1927—

HAROLD C. MILNES, Machine Shop Practice, Foundry Work, Pattern Making.

Armour Institute, 1904-1906; The Stout Institute, 1928, B. S.; Iowa State College 1936, M. S.; four years practical work in machine trades; Teacher of Manual Arts, Evansville, Indiana, 1909-1916; The Stout Institute, 1916—

PAUL C. NELSON, Elements of Woodwork, Carpentry, and Visual Education.

The Stout Institute, 1932, B. S.; Iowa State College, M. S., 1934; Trade experience, eighteen years; Vocational School and High School, Racine, Wisconsin, eight years; evening classes in cabinetmaking and in trade preparatory and trade extension work in the building trades, six seasons; The Stout Institute, 1926—

MERLE M. PRICE, Social Science.

State Teachers College, St. Cloud, Minnesota, Diploma, 1921; University of Minnesota, College of Education, B. S., 1924; M. A. 1929; H. S. Principal, Gonvick Minn., 1921-22; H. S. Principal, Park Rapids, Minn., 1922-23; Teacher, Advanced English, Extension Division, Minneapolis Public Schools, 1923-24; H. S. Principal, Grand Marais, Minn., 1924-26; Teaching, University of Minnesota, 1926-29; The Stout Institute, 1929—

HENRIETTE L. QUILLING, Home Economics Education.

The Stout Institute, B. S., 1931; Graduate Work, The Stout Institute, Summer Sessions, 1935, 1936, 1937; Teacher Home Economics, Fort Atkinson, Wis. 1931-35; Klamath Falls, Oregon, 1935-37; The Stout Institute, 1937—

J. E. RAY, Architectural, Mechanical, and Freehand Drawing, Masonry and Building Construction.

Williamson Trade School, 1908; The Stout Institute, 1917; B. S., 1922; M. S., Iowa State College, 1930; Seven years experience as a Journeyman and Foreman Bricklayer; The Stout Institute, 1914-27; Instructor in Advanced Drafting in Waukegan Township High School, Waukegan, Illinois, 1927-30; The Stout Institute, 1930—

CORYDON L. RICH, Mathematics and Science.

State Teachers College, Oshkosh, Wisconsin, Ed. B., 1929; University of Wisconsin, 1930, Ph. M.; Principal, Soldiers Grove Wis. 1920-22 and 1923-26; Kewaskum, Wis., 1922-23; Monticello, Wis., 1926-29; State Teachers College summer session, 1926; State Teachers College, Whitewater, Wis., 1930-31; The Stout Institute, 1931—

MABEL C. ROGERS, Foods and Nutrition.

Michigan State College, B. S., 1910; Columbia University, A. M., 1917; University of Minnesota, Graduate Work, 1933-35; Head of Department, Home Economics, Midland, Michigan, 1910-13; Head of Department, Home Economics, Alma, Michigan, 1913-15; State Demonstration Leader, Home Economics, Extension Division, Massachusetts Agricultural College, 1917-18; Teacher of Foods and Nutrition, Bloomsburg, Pennsylvania, State Normal School, 1920-22; Assistant Professor, Home Economics Education, Michigan State College, 1923-32; The Stout Institute, 1935—

BOYD CARLISLE SHAFER, History and Social Science.

Miami University, A. B., 1929; Assistant, 1928-29; State University of Iowa, M.A., 1930; Ph.D. in History, 1932; Graduate Assistant in American and European History, State University of Iowa, 1929-32; The Stout Institute, 1932—

LABAN C. SMITH, Education.

University of Wisconsin, B. A., 1932; University of Wisconsin, M. A., 1933; University of Wisconsin, Ph. D., 1937; Teacher, English and French, Sturgeon Bay, Wisconsin, 1934-35; Teacher of Principles of Ed., Philosophy of Ed., and History of Ed., University of Wisconsin, 1935-37; The Stout Institute, 1937—

GLADYS TRULLINGER, Home Economics Education.

University of Nebraska, B. S., 1926; M. S., 1936; Ewing, Nebraska, Vocational Home Economics, 1926-29; Plainview, Nebraska, Vocational Home Economics, 1929-36; The Stout Institute, 1936—

F. E. TUSTISON, Mathematics, Science, Home Mechanics.

Ohio Wesleyan University, B. S., 1909; University of Wisconsin, M. S., 1928; practical experience in electrical installation, motor testing, and cabinetmaking; Director of Gymnasium of Shattuck Military Academy, 1909-1910; Instructor of Science, Somerset High School, 1910-1920; Acting Superintendent of Somerset City Schools, 1919; The Stout Institute, 1920—

HAZEL VAN NESS, Clothing.

Syracuse University, B. S., 1921; Columbia University, A. M., 1929; Instructor, Clothing and Design, Syracuse University, 1922-27; Assistant Professor, Clothing, Colorado Agricultural College, 1927-28; The Stout Institute, 1929—

LETITIA E. WALSH, Home Economics Education.

Iowa State Teachers College, B. A., 1915; Columbia University, M. A., 1920; Graduate Study, University of Chicago, 1917; Supervisor of Practice Teaching in Home Economics, Iowa State Teachers College, Cedar Falls, Iowa, 1915-1919; The Stout Institute, 1920—

R. L. WELCH, Vocational Education.

James Millikin University, Department of Mechanical Engineering, 1908-1911; Department of Industrial Education, 1914-1915; B. E., University of Arizona, 1932. Colorado State College 1937; Practical experience in the Metal Trades. Director of Industrial Education, Somerset, Kentucky, 1915-1916. Instructor in Mechanical Engineering, South Dakota State College 1916-1918. The Stout Institute 1919-1926. Teacher trainer for trade and industrial education, State Board of Vocational and Adult Education, 1926—

RAY A. WIGEN, Woodworking.

River Falls State Teachers College, 1914-16; Univ. of Minnesota, B. S., 1930; Univ. of Minnesota, M. A., 1933; Industrial Arts Dept., Mazeppa, Minnesota, 1916-18; Buffalo, Minnesota, 1920-25; South St. Paul, 1925-32; The Stout Institute, 1933—

General Information

* * * * *

REGULAR SESSION, 1938-39

LOCATION

The Stout Institute is located in Menomonie, Wisconsin, sixty-five miles east of St. Paul, on the Chicago and Northwestern Railway. Menomonie is also connected with Mississippi River points by the Chicago, Milwaukee, and St. Paul Railway. It is on United States Highway No. 12 and on State Highways Nos. 25, 29, and 79.

HISTORY

With the creation of Wisconsin as a state in 1848, there came prompt recognition of the educational needs of the new commonwealth. Immediately by the creation of its first state normal school, Wisconsin provided for teacher training. While Massachusetts and Pennsylvania preceded Wisconsin in the organization of normal schools, the records show that in 1867 Wisconsin was leading even these states and all other states in the number of state normal schools established. In that year, Wisconsin was operating five state normal schools, one more than existed in any other state. Wisconsin demonstrated its leadership again when in 1911 it provided a teacher training school charged with the preparation of teachers of Home Economics and Industrial Arts. In that year, after eighteen

years of operation as a privately endowed training school, The Stout Institute became a state institution.

The Stout Institute pioneered in placing instruction in industrial arts and household arts in a system of public schools. Menomonie was the first city in America in which manual training and domestic science were made a part of the course in all grades of the public schools and high school. This training was under the supervision and instruction of The Stout Institute.

During the early experimental years, these schools were constantly visited and inspected by educators from the east, west, north, and south. The manual and household arts began to find their way into other school systems. Teachers had to be supplied. The Stout Institute alone at that time was ready to furnish them. It was, then, in reply to a general demand, that The Stout Institute became a teacher training college, the first in America to dedicate itself wholly to the preparation of teachers of industrial arts and household arts. It is still the only—as it was the first—college in this country giving itself wholly to that purpose.

Indirectly, The Stout Institute owes its existence in Menomonie to the lumbering interest which, in 1889, brought James H. Stout to northwestern Wisconsin. Here Mr. Stout amassed a considerable fortune as one of the partners of the Knapp, Stout and Company, long recognized as one of the major lumbering companies of the northwest.

It was James H. Stout who had the vision and conceived the purpose and plan of organization of The Stout Institute. His success in the lumber industry made it possible for him at least partially to realize his dream before death interrupted his work and cut short a program which would have changed completely the future of the school, and would, without doubt, have left the school amply endowed.

The first building erected contained just two rooms, one given to manual training and the other to domestic economy,

as homemaking work was then termed. The work immediately proved to be so popular that Mr. Stout erected in 1893 a large building, costing in that day of extremely cheap construction $100,000, and equipped it completely for carrying forward many lines of handiwork. This building served its purpose for only four years, when it was destroyed by fire. During the school year 1898-1899, a larger and better building was erected by Mr. Stout as a monument to his faith in the cause he espoused.

Prior to 1903, Mr. Stout's efforts were dedicated to the boys and girls of Menomonie, and all shop and laboratory work was carried forward under the administration of the public schools. In 1903, however, the character of the school was greatly changed and broadened in scope by the organization of The Stout Training School, and the dedication of its efforts to the training of teachers of manual and household arts.

At that time Lorenzo Dow Harvey, State Superintendent of Public Instruction, nationally recognized as an educational leader, was made Superintendent of Schools of Menomonie and President of The Stout Training School. Here began the development of new ideals in education and the breaking down of old practices.

In September, 1903, there were 25 men and women enrolled in the training school. The next year 48 registered, and in 1905, 98 reported. Three years later, in 1908, there were 197 students enrolled, and in 1913, ten years after this organization became effective, more than 500 students were in attendance. Early in 1908 another important change came, when through articles of incorporation, The Stout Training School became The Stout Institute. In the purposes enumerated in its charter could be seen the development of a greater school.

James H. Stout died in 1910. After his death, the school would not have survived except for the courageous leadership of President Harvey, who prevailed upon the state of Wisconsin to assume all responsibility for the financing of the school.

In 1911, The Stout Institute became a state school. Since that date, it has been administered by the Board of Trustees of The Stout Institute. Under these conditions, the school assumed new obligations, among which was to produce a sufficient supply of competent teachers of home economics and industrial education to meet the needs of the state. The Stout Institute was still a junior college. The demand for Stout Institute graduates increased so rapidly that a further extension of courses became imperative.

The larger high schools began to demand teachers with four years of college training and a college degree. In recognition of that fact, the legislature, in 1917, extended the course to four years and authorized The Stout Institute to grant degrees. For several years, however, the school continued to grant the two-year diploma, because the demand for teachers trained at Stout far exceeded the supply of four-year graduates.

The 1925 catalog omitted the two-year course and set three years as the requirement for the diploma. Moreover, higher standards of preparation were required. With the beginning of the school year in September, 1926, all shorter courses were discontinued, and all freshman students were enrolled on the four-year basis.

While the greater part of the students come from Wisconsin, almost every state in the country is represented in the year's enrollment at The Stout Institute. Stout graduates are teaching in every state in the Union. They are teaching in Canada, the Canal Zone, Hawaii, Cuba, and the West Indies. The Stout Institute strives not for enrollment, but for superior accomplishment.

COLLEGE ASSOCIATION AFFILIATIONS

Soon after The Stout Institute restricted its work to a four-year curriculum, it was accepted by the North Central Association as a member of the teachers college group and two

years later was taken into full college membership. Since the formation of the American Association of Teachers Colleges, The Stout Institute has maintained membership in that organization. The college is also a member of the American Council on Education.

BUILDINGS AND GROUNDS

Four large, thoroughly equipped buildings (the Home Economics building, the Industrial Education building, the Gymnasium, and the Trades building) comprise the central plant. In addition there are three dormitories, a Homemanagement House, and an infirmary.

The grounds include spacious lawns for the women's dormitories, a practice field, tennis courts, and the Burton E. Nelson athletic field. During the fall of 1935, a shelter house was constructed, which includes complete facilities for dressing rooms and shower rooms for two teams. The administration plans, as the next project, a new field house or an extension to the present gymnasium. Recently the state purchased the site needed for this building. The institution represents an investment of more than a million and a quarter dollars.

Library

A library that meets the requirements of the North Central Association and provides a wide range of up-to-date reference works in home economics and industrial education besides a large number of magazines and books for purely cultural reading is housed in the Home Economics building. It is open when school is in session through the school day and evenings except Friday and Saturday. It is also open Saturday forenoon.

Laboratories and Equipment

The shops for the teaching of industrial subjects are all well equipped and kept up-to-date. The Trades building is devoted exclusively to shops containing all needful equipment for elementary and advanced classes in carpentry, cabinet-

making, general woodworking, auto mechanics, sheet metal, painting and finishing, architectural and machine drafting, and visual education. A new room is being equipped as a modern industrial mechanics shop. It has provision for use of all types of visual education equipment. The Industrial Education building has completely equipped shops for machine shop, general metal, foundry, printing, general mechanics, and electrical. A physics laboratory and shops for practice teaching are also housed here. Necessary lecture rooms for general subjects are provided throughout the building.

The laboratories for home economics instruction are among the best in the country. All located in the large home economics and administration building, they include units for textiles and arts, nutrition and foods, nursery school, homemaking, and sciences. Lecture and demonstration rooms are comfortable and commodious. Throughout, the equipment is up-to-date and adequate for all levels of work. Elevator service during class hours is an added convenience.

Auditorium

One of the wings of the Home Economics building houses a large, modern auditorium with a seating capacity of 800. At least once each week an attractive program of an educational or entertainment nature is presented by nationally known speakers or entertainers. The large stage makes possible the appearance of large musical organizations, local and traveling, and provides excellent facilities for work in dramatics.

Dormitories for Women

Bertha Tainter Hall accommodates about twenty-five young women. The Hall is furnished with all modern conveniences, and is well-lighted, heated, and ventilated. This building was thoroughly remodeled recently, and the interior was completely modernized, redecorated, and largely refurnished.

The Tainter Annex adjoining it was remodeled and modern-

ized throughout. More light and more room space are provided. Old bathrooms were removed and new bathrooms installed. Another living room and a sun room were added. The gray stucco on the outside has been replaced by fireproof asbestos shingles which add greatly to the appearance of the building and materially reduce fire hazard.

This dormitory now accommodates sixty-four students with comfort.

All nonresident freshman and sophomore women are required to live in the dormitories. All junior and senior women under twenty-five years of age are also expected to live in the dormitories, when accommodations are available.

Dormitory for Men

Lynwood Hall was built for the purpose for which it is used and is in every appointment adequate and complete. Until the summer of 1930 it was used as a women's dormitory. That summer it was remodeled and enlarged as well as refurnished in part, and was made a men's dormitory.

Here also more improvements are being made. The purpose is to add to the comfort, convenience and happiness of all students in residence. These improvements include the enlargement of living and recreation rooms, the insulation of the building to make the rooms as sound-proof as possible and to make the building more comfortable. The old bathrooms are being replaced by new ones; additional toilet and bath facilities are being provided. Exterior improvements are also being made, all of which will add to the appearance and attractiveness of the building.

Nonresident freshmen and sophomore men are required to room at Lynwood. They are also required to board at the Stout Cafeteria, a half block distant. They must purchase three five-dollar cafeteria coupon books each month. No exception is made to this requirement.

Concerning all Dormitories

Room rent in dormitories is payable by semesters, in advance at the beginning of each semester. Board is payable four weeks in advance.

The charge for a room for each student for the school year of thirty-six weeks is $80.00 to $85.00, according to size and location of the room. These prices apply to all dormitories.

In Tainter Hall and Annex, the charge for meals and a definite amount of laundry work for each student is $5.75 per week. A laundry in connection with the women's dormitories provides service to students in those dormitories at a minimum charge. All Stout dining rooms are under the direct supervision of trained dietitians. Balanced meals are carefully planned with the thought in mind that the health of the students is of primary importance.

Rooms in dormitories will be available Sunday, September 11, 1938. Meals will be served beginning Monday morning, September 12, 1938.

All first year entrants and all transfer students must fill out an application form for a room and send it as early as possible to the Director of Dormitories at Tainter Hall. The necessary form is one of the several forms included in the enrollment papers. A room reservation fee is not required but all applicants for admission are held financially responsible for room rent unless the reservation is cancelled at least one week before the opening of the school year.

All rooms are assigned for the entire academic year. Each room is furnished with two single beds, size of each three feet by five feet six inches, with mattresses and pillows for same, dresser, study table, chairs, bookcases and rug. Sheets, pillowcases, and laundering of same are also supplied. The student must supply dresser scarf, couch cover, waste paper basket, towels, blankets or comfortables, and simple curtains which should be arranged for with roommate after assignment of room has been made.

Students are requested not to bring additional furniture or decorative lamps, particularly floor lamps. A practical study lamp for the table, with rubber insulated cord and plug is permissible and desirable. All such lamps will have to be inspected by the school electrician before they are used. Radios are not permitted in students' rooms. A community radio is supplied. Additional furniture is neither necessary nor desired.

The Infirmary

The Stout Institute maintains an infirmary for the care of students, where every detail of health and sanitation is carefully supervised. A resident registered nurse supervises the health of students throughout the college and is on duty at the Infirmary. The nurse maintains regular office hours in her rooms in the Home Economics building, where she is easily consulted by students. A college physician is available for consultation to all students. Students are given a medical examination annually.

An infirmary fee of two dollars and fifty cents per semester is paid by all students. This fee insures dispensary service and three days of hospital care without charge. After the third day a charge of one dollar a day will be made for meals. Students rooming in dormitories where meals are served will not be charged for meals while at the infirmary.

Any student who is too ill to attend classes should report at once to the school nurse. Students living in Menomonie shall have their parents or guardian notify the school nurse. Cases of severe illness or other serious situations that will enforce prolonged absence shall be reported to the Dean of Home Economics or the Dean of Industrial Education.

Homemanagement House

A thoroughly modern and fully equipped Homemanagement house has replaced the old frame building which stood on the same site for more than sixty years. This new Homemanagement house is a brick veneer building, of ample size, containing all conveniences and accommodations needed in such a building. Recreation room, store room, and laundry are found in the basement. A large living room, dining room, kitchen, and director's living quarters are on the first floor. On the second floor are large, comfortable, well-lighted student rooms. The building is heated by an oil burning furnace, and the air is conditioned for moisture and temperature by modern apparatus.

The Tea Room

The Stout Tea Room offers an excellent opportunity for students and faculty members to meet and to entertain guests. Attractive, well balanced luncheons are planned, prepared, and served by Institutional Management students. The work is under the management of the director of the cafeteria. This tea room is also the scene of many special luncheons and dinner parties given by student organizations.

The Stout Cafeteria

The Stout Institute Cafeteria, located in the east end of the Home Economics building, is for the use of students and faculty and their guests. At present several hundred may be accommodated for three meals daily. The equipment is complete and modern; prices are moderate; the service is adequate; the food is excellent. Students are obtaining meals for the week at from $4.50 to $6.00. For the school year 1938-39 the cafeteria will open Monday noon, September 12, 1938.

Other Living Facilities

Accommodations for men and women not living in dormitories may be procured in the city at varying rates, depending upon location and quality of service. Rooms may be had as low as $2.00 per week per person, and table board may be obtained in private homes at $4.50 to $5.50.

ADMISSION TO COLLEGE

Students may enter at the beginning of either semester or the summer session.

Admission to the college may be secured:

1. By presenting a certificate of graduation from an accredited high school.
2. By submitting evidence of studies successfully pursued in another institution of higher learning.
3. By qualifying as an adult special student.

Prospective students may learn at any time of year by corresponding with the Registrar whether or not they have the necessary qualifications for admission and upon what basis they may be admitted. Students may enter The Stout Institute at the opening of either semester or of the summer session, but all credentials should be filed sufficiently in advance of the date chosen to permit the Registrar to pass upon them and to issue the proper certificates of admission. Candidates for admission in September should have their credentials filed with the Registrar by the first of August. The credentials must in every case include a complete record of all previous secondary school and advanced work.

Persons who plan to enter Stout should fill out an application for enrollment in advance. Blanks will be furnished by the President upon request. This enrollment blank, including the health certificate, when filled out, must be forwarded to the President. While advance enrollment is not absolutely necessary, it is advisable as the number admitted to beginning classes is limited and advance enrollment insures a place in these limited sections.

All students are expected to register on general registration days. Late registration is not approved. In case of registration after the first week of school, a $5.00 fee will be charged. No registration after the second week will be accepted.

Entrance Requirements

Entrance requirements of The Stout Institute shall be interpreted as graduation from an approved high school or equivalent training. Not less than 15 units shall be accepted.

1. The following units shall be required of all:
   English ..... 3 units
   Mathematics ..... 1 unit
2. Two units are to be presented from one of the following:
   Foreign Language, History, Social Science, Science.
3. In addition to the units required under 1 and 2, a sufficient number of units to make a total of fifteen must be offered from Groups A and B. Not more than 5 units may be offered from Group B.

Group A	Group B
English and Speech	Agriculture
Foreign Language	Commercial Subjects
History and Social Science	Home Economics
Mathematics	Industrial Arts
Science	Mechanical Drawing
Advanced Applied Music and Art	Optional (2 units)

4. A high school graduate need not meet the above requirements if he is recommended by his high school principal and if he stands in the upper one-half of his class. But it is required that wherever mathematics is a prerequisite for successful work in a course, the high school deficiency must be made up if it exists, and for this the college will not hold itself responsible for providing facilities.

A certificate of recommendation, which may be obtained from the principal of the high school, should be filed with the President as early as possible. Students entering Stout are required to submit a physician's certification of their physical condition, including a certificate of vaccination. A supplementary examination is made of all first year students and

an annual examination of all students is required. The examination is made by a consulting physician connected with the institution. The charge for this examination is included in the infirmary fee referred to elsewhere. These credentials, together with an approved statement of rooming arrangements, are required before the enrollment is considered complete.

For admission to the vocational special course, high school graduation is not required, but letters indicating trade experience are required.

Mature students who are deficient in entrance credentials may take entrance credential examinations while in attendance.

Transferred Credits

Students entering The Stout Institute who have had any work whatsoever in another institution of higher learning, regardless of whether or not they wish to receive credit for it, must submit complete credentials of both their high school and college work. All such transcripts and supplementary material should be sent at least six weeks preceding the opening of the session the student desires to enter.

Students whose transcripts of advanced standing show an average below C will be accepted on probation.

Graduate students who hold Bachelor's degrees from other institutions must spend one year in residence and meet the minimum requirements of their major in order to obtain the degree of Bachelor of Science from Stout.

A maximum of eight semester hours of modern foreign language will be allowed as elective credit with a minimum of not less than four semester hours in one language.

Sixteen semester hours of approved courses done through extension or correspondence, not more than five semester hours of which shall be correspondence credit, shall be the limit accepted by The Stout Institute for graduation requirements.

SPECIAL STUDENTS

All students taking work for credit toward degrees are regular students. The Administration urges very strongly that all students enter regular courses and take the work outlined for those courses, even though they may not be able to stay on for the time required to complete them. Students are given special classification only when age and preparation of the applicant, in the opinion of the President, makes such classification expedient and justifiable.

CREDITS, GRADE POINTS, AND ATTENDANCE

In order to receive a degree, the student must not only gain the requested number of credits in the course which he is pursuing, but he must also attain a certain standard of scholarship. This standard is fixed by the grade point system, which requires for graduation as many grade points as credits. Grade points are apportioned as follows:

A	(94-100)	3 grade points per semester hour credit.
B	(86-93)	2 grade points per semester hour credit.
C	(78-85)	1 grade point per semester hour credit.
D	(70-77)	0 grade point per semester hour credit.

The maximum number of grade points that can be earned by a student graduating with 124 credits is 372; the minimum is 124. Students who graduate under the 128-hour curriculum must earn 128 grade points. It is evident that an average grade of C is necessary for graduation. Students who fall behind in the required number of points are ineligible for graduation.

In determining grade points for two-year diploma graduates of The Stout Institute who reentered after September, 1927 only such credits as are earned after that date are used in computing the number of grade points for such students. When computing grade points for students who enter with advanced credits, only those credits which are earned in The Stout Institute after September, 1927, are used in computation. In

order to qualify for a degree, such transferred students must receive as many grade points as the number of semester hours required for obtaining the degree.

Incompletes are given only in cases in which the absence incurred has been due to situations over which neither the teacher nor student has any control. To secure an Incomplete, a student must have a passing grade in the course at the time of withdrawal.

Residence Requirements

The minimum residence requirement is thirty-two semester hours and thirty-two grade points to be earned in at least thirty-six weeks of attendance at Stout Institute. All students must earn final credits for graduation in residence. A two-year diploma graduate of Stout Institute may meet the residence requirement for the degree of Bachelor of Science with the minimum of three summer sessions or one semester of attendance at Stout Institute, subsequent to receipt of the diploma. In any case twelve of the last eighteen semester hours must be earned in residence.

Degrees

The Bachelor of Science degree is conferred upon all students completing curriculum requirements in the Division of Home Economics and in the Division of Industrial Education. These courses require four years of work beyond the high school. Upon completion of this work a diploma is issued, which by statute is made the basis for a life certificate after two years of successful teaching in Wisconsin. This life certificate legally qualifies the holder to teach in the public schools of the state the subjects in which training has been taken. The license is issued by the Wisconsin State Department of Public Instruction.

Fully registered students at The Stout Institute, in the Division of Home Economics, must complete one hundred and twenty-four semester hours and one hundred and twenty-four

grade points, plus the requirements in physical education. Students in the Division of Industrial Education must complete one hundred and twenty-eight semester hours and one hundred and twenty-eight grade points, plus the requirements in physical education.

Transfer of Records

Students wishing to transfer from The Stout Institute to another institution should request the Registrar to send a transcript of record and letter of dismissal, giving notice of at least one week. One transcript of record is furnished each student without charge; a fee of one dollar is charged for each additional transcript. This fee must be sent with the request.

EXPENSE ESTIMATES

Estimates on Usual Expenses Incurred by a Student for a Regular Session of Thirty-Six Weeks

	Women	Men
Library Fee (Semester $3.50)	$ 7.00	$ 7.00
Physical Education Fee (Semester $2.00)	4.00	4.00
Infirmary Fee (Semester $2.50)	5.00	5.00
S.S.A. Membership	10.00	10.00
Room Average Dormitory Rate (Rooms out in town vary according to desirability of room and location)	80.00	80.00
Board—Dormitory rate for women. (Rates out in town vary somewhat)	198.00	216.00
Laundry	18.00	25.00
Material for Classes for Women (average)	20.00	
Laboratory Fees for Women (average)	25.00	
Shop and Laboratory Fees for Men (average)		30.00
Drawing Instruments, shop clothes, small tools, etc.		27.50
Estimated Expenses for Residents	367.00	404.50
Tuition for Nonresidents	124.00	124.00
Estimated Expenses for Nonresidents	$491.00	$528.50

The fact that incidental expenses, amusements, traveling expenses, postage, clothing, personal supplies, etc., are not included in the above must be taken into consideration.

Fees for individual courses are listed in The Stout Handbook.

Tuition, Regular Session

Tuition is free for residents of Wisconsin. The tuition charge for nonresidents and the definition of nonresidents are covered in the following quotation from the Wisconsin Statutes:

"Any student attending The Stout Institute who shall not have been a resident of the state for one year next preceding his first admission thereto shall pay a tuition fee of one hundred twenty-four dollars for the school year and a proportionate amount for attendance at the summer session."

Tuition is payable in advance each semester.

Shop and Laboratory Fees

Fees are charged for shop and laboratory courses to cover the per capita cost of materials used by students in these courses. In addition to the shop and laboratory fees, students are required to pay for any breakage or damage to buildings for which they are responsible. Fees are payable registration day at the beginning of each semester and summer session. The fee receipt is to be retained by the student to gain admittance to classes. A charge is made for duplicate receipts.

Library Fees

A library fee of $3.50 is payable by each student at the beginning of each semester. For this fee all necessary textbooks are furnished from the loan textbook library without any extra charge to students. The reference library is supplied with standard books needed to supplement textbooks in different subjects.

The reading room is supplied with daily and weekly newspapers, educational, literary, and technical periodicals, adapted to the needs of the students and available for their use.

In addition to The Stout Institute library, students have access to the Memorial Free Library, one block from The Stout Institute main buildings. The combined facilities of the two libraries make available 32,000 volumes, exclusive of public documents.

Incidental Fees

Special Examination Fee (taken in special cases only)	$2.00
Fees for Transcripts. A student is entitled to one transcript of his credits. Each additional copy is issued at the rate of	1.00
Locker Keys Deposit $2.50—Refund	.75

SCHOLARSHIPS AND AWARDS

In 1921, Mrs. Mary J. Eichelberger of Horicon, Wisconsin, willed to The Stout Institute twenty thousand dollars in preferred stocks and cash. This legacy came to the institution without stipulation as to the purpose or use to which it was to be put. For several years no use was made of this fund.

In 1924 the Administration recommended that the earnings from the principal and such part of the principal as might be necessary should be used in making loans to worthy and capable students when in need. No part of the principal has been used. The fund has, through dividends and interest additions, increased to a considerable sum. Ten thousand dollars is now being used by students in attendance or is being repaid by students who have graduated.

Certain requirements are set up to govern the committee in passing upon applications for loans. There must be evidence of real need. Freshmen are not accorded the use of this money. Loans are made only to students of good moral character, fairly high scholarship, and excellent promise as teachers.

Scholarships, known as the Eichelberger scholarships, eight in number, to a total of four hundred dollars, are awarded annually, during commencement week, to four men and four women. These awards are based upon scholarship, personality, promise of success, social attitudes and accomplishments, and value to the school. Only those having high scholastic ranking are given consideration. The selection of the candidates is made near the close of the regular school year by a special committee appointed each year by the President of the college.

SELF-SUPPORT AND STUDENT AID

While there are opportunities for a student to earn a part of his expenses while pursuing courses, it should be borne in mind that the courses are designed to require the whole of his time and effort and that the amount of outside work he will be able to do cannot be great. For this reason students whose funds are insufficient to meet their expenses for at least the first year, are not encouraged to enter college. Students working to earn part of their expenses are expected to carry a reduced program.

As far as possible, students are employed for extra work about the library, laboratories, and in the cafeteria, and as janitors. Some opportunities offer themselves outside of school agencies. A great deal depends, of course, upon the ability and energy of the individual, and his willingness to do any kind of work. The best places are usually obtained by those who have been in college for some time.

Stout does not guarantee employment. It does, however, make a special effort through its College Employment Bureau to locate students needing work as a means of paying expenses.

The school operates a Student Loan Fund and makes available to needy and deserving students aid within the limits of the fund. Loans are not made, however, to freshmen students and are made only to those students whose school records recommend them to the Committee on Student Loans. Money

from this fund is loaned at five per cent, and the loans are made returnable at the latest within one year after the student leaves school.

FEE FOR SCHOOL ACTIVITIES

The Stout Institute offers a wide range of student activities. Besides the regular classes in physical education for men and women, Stout is represented each year by strong football, basketball, baseball, and track teams. Flourishing glee clubs, one for the men and one for the women, have been maintained for a number of years. A band and an orchestra add greatly to the life of the school. All musical organizations are under the supervision of a trained and capable director. Dramatics is centered in the organization known as the Manual Arts Players. A permanent Lyceum committee is maintained, operating each year a five or six number course of the very best talent available. Weekly assemblies bring to the students many excellent lecturers, entertainers, musicians, artists and musical organizations of outstanding ability. The college paper, The Stoutonia, is published each Friday. The Tower, the college yearbook, and Young Wings, a literary magazine, are also products of student activities at Stout. Numerous social affairs take place throughout the year in the school gymnasium.

All of these organizations through contests, concerts, plays, programs, contribute to the social life of the school. The management of admission, booking, and relationship with various student activities is through the Stout Student Association, the officers of which are elected each spring at a regular all-school election.

The membership charge, $10.00 per year, is payable by all students, $5.00 at the beginning of each semester. This membership gives every student of the college admission to all athletic events including football, basketball, and baseball, all concerts by student musical organizations including the Band,

Orchestra, Men's Glee Club, and Women's Glee Club, productions of the Manual Arts Players, all lyceum and assembly programs and other entertainments under the supervision of the student association, educational and other lectures, all student dances given under the auspices of the student association, and the semester's subscription to the student weekly newspaper, The Stoutonia. The Stout Student Association membership has eliminated the necessity for the many former student drives for the financial support of the usual college activities. The only exceptions are the college annual, The Tower, and the religious and social organizations. The association has added much to the social atmosphere of the school and has systematized and made harmonious all school activities.

REFUNDS

Students who are compelled to withdraw from the college by reason of illness, not due to poor physical conditions or ill health existing before entering, are entitled to a refund of tuition from the date when notice of such withdrawal is received to the end of the semester.

Students boarding in the dormitories are also entitled to a refund of whatever amount has been advanced for board beyond the date when notice of withdrawal is received.

Refund for advance payment of room rent in the dormitories is allowed from the date when the room is again rented. Effort is made to get an occupant at the earliest date possible.

As books and supplies for which fees are charged have to be bought in advance in quantities necessary to supply the entire enrollment, no refund of fees is made in any case.

REGULAR SESSION ENROLLING

The 1938-39 school year opens Monday, September 12, 1938, the first semester closing January 27, 1939. The second semester opens January 30, 1939, and closes June 2, 1939.

General Information

SUMMER SESSION 1938

* * * * *

The thirty-third annual summer session will be held during the summer, 1938. During the summer session, classes are held five days per week affording opportunity for week-end recreational use of Lake Menomin, the Red Cedar River, and the northern Wisconsin "Land o' Lakes" country.

Summer session classes are designed to meet the needs of various groups of people. Former students and graduates of the diploma course have excellent opportunity for taking advanced work for credits toward their degree. Supervisors and teachers of industrial education or home economics can strengthen their work in techniques or in the field of education. All persons interested in specific studies related to work in industrial or homemaking courses will find much of interest in the summer session schedule. The Stout Institute has been designated by the State Board of Vocational and Adult Education as the institution in Wisconsin for the preparation of teachers for vocational schools. Special provision is made in the summer session for meeting professional requirements resulting from new federal and state legislation.

Special lecturers are secured for the summer session. As a rule, these lecturers spend not less than two days on the campus, conducting the special conferences, as well as presenting general lectures. It has been the policy of the college to secure special speakers peculiarly well qualified to handle the larger social problems of the present time with special emphasis upon the relationships which home economics and industrial education teachers have in the solution of these problems.

Credit granted for courses taken during the six weeks ses-

sion will be in the same amounts as credit granted for the same courses during the regular session. This is made possible through the assignment of increased time per day, per subject, and an increased number of meetings per week. In some instances, courses are offered in half credit amounts, it being possible to take one-half of the course in one summer, followed by the other half the following summer.

During the last several summer sessions, there has been a very marked trend toward use of the summer sessions as an extension opportunity for teachers in service. A large portion of the summer session enrollment has been made up of teachers who come from teaching positions for the summer and return to their positions in the fall.

Teachers whose work remaining for the Bachelor's degree is in amount too large to be conveniently completed through summer sessions are advised to make use of semester leaves of absence to permit attendance for one or more semesters during the regular session. In preparing the summer program on the six weeks basis, certain courses will be offered every other year by using alternation of courses. Opportunity is offered in various courses to meet the rapidly changing requirements in teaching positions.

The April issue of The Stout Institute bulletin is the annual summer session bulletin. This contains general information on the summer session, descriptions of courses, and the summer session class schedule, including both undergraduate and graduate work. It will be sent on request.

GRADUATE PROGRAM

The Wisconsin Legislature of 1935 granted The Stout Institute the authority to inaugurate a fifth year of work, on the graduate basis, leading to the Master of Science degree, with majors in home economics education and industrial education. The initial offering of graduate work was

made in the 1935 summer session. For the present, the graduate work is offered in the summer session only. The summer session bulletin, issued each year on April 1st, carries detailed information on courses available on both the undergraduate and graduate levels the following summer.

General Plan

The individual graduate student will work with his advisor in his major field in a formulation of a tentative distribution of work. The approval of the advisor and of the graduate committee will be necessary. Thirty semester hours of work will constitute the credit requirements. The individual student's plan for his work will be arranged tentatively during the first summer session in which the student attends on a graduate basis. Work for the Master's degree must be completed within six years. Requests for extensions will be given consideration by the committee. The minimum length of time spent for graduate work shall be one year. Not more than six semester hours of credit may be transferred from other institutions.

Admission

Students who hold the degree of Bachelor of Science from The Stout Institute, or its equivalent, may take graduate courses. Important considerations of the graduate committee in granting approval on admission applications will be: The applicant's having earned an approximate grade point average of 1.5 as an undergraduate; the applicant's having had satisfactory practical or teaching experience. Students whose candidacy has not been clearly established will be accepted on probation. Credit toward the Master's degree will not apply until the student has been accepted as a candidate for the degree. Students whose undergraduate work was not taken at The Stout Institute should have their transcripts sent to the Registrar not less than one month prior to the opening of the summer session.

Fees

A matriculation fee of $5.00, which is paid once, is required of all graduate students. This fee is paid at the time of the student's first registration at The Stout Institute for graduate work. A tuition fee of $15.00 is required of all graduate students for each six weeks' summer session. The regular college fees, applicable to all students (Library Fee, $1.50; Activities Fee, $2.00) will be paid by graduate students.

Group I.

Minimum requirement—four to six hours. (Four semester hours if any in this group have been taken as undergraduate credit.) Includes basic professional courses.

Group II.

Minimum requirement—six semester hours selected from this group or courses remaining in Group I. Primarily an elective group with selections determined by the student's general and professional interests.

Group III.

Minimum requirement—fifteen semester hours.

Is for the purpose of developing sequences of concentration in the direction of the professional advance of the individual student. Selections of courses to develop sequences in this group will consider the individual's professional progress to date, present location, and expanding responsibilities. As the plan of concentration in this group is developed through conferences, it will constitute a significant control in the selection of the thesis title or the problem studies.

The maximum credit allowed for the thesis will be six semester hours. The approval of the thesis selection, or the selection of problem studies in lieu of the thesis, will be made with the guidance and approval of the graduate committee and the dean of the division in which the student is majoring.

Credit requirements by groups are indicated in minimums. The maximum credit taken in each group will be determined by the fields of emphasis and concentration in the individual student's plan. Complete information on the graduate courses to be offered in specific summer session schedules are included annually in the summer session bulletin. Those interested in complete information on the graduate work should secure the summer session bulletin issued each year on April 1.

Courses of Study, 1938-1939

Industrial Education

The four-year curriculum in the Division of Industrial Education at The Stout Institute leads to the Bachelor of Science degree in Industrial Education and the special state license. Supplementary licenses to teach additional subjects are based on the electives selected. The general purpose of this curriculum is to provide a balanced educational development. This balanced development is brought about through closely integrated courses in sequenced progression within the several subject groups in technical work, in English, social science, science, mathematics, and education. The specific purpose in the curriculum is to prepare the students for the requirements of the industrial education teaching and supervisory positions in elementary schools, junior high schools, senior high schools, and vocational schools. Through controlled choices in the technical and educational sequences, provision is made for licensing or certificating requirements of state departments of education. Through carefully balanced sequenced progression in academic courses, a basic preparation is provided for continued professional study on a graduate level.

The first and second years are general preparation. Students are required to take the range of work indicated in these years in the technical and other sequences. The basic exploratory range of industrial work required in the first year is supplemented by controlled choices in the second year which continue the development of a broad general foundation in this sequence.

CURRICULUM IN INDUSTRIAL EDUCATION
FIRST YEAR

			Sem. Hrs.
*English	102 a-b	English Composition	6
*Mathematics	207-211	Algebra I-II	4
Social Science	103	American History	2
Social Science	105	American Government	2
English	106	Speech I	2
Industrial Education	(See List)	Shop, Drawing, Design	16
Physical Education	127	Physical Education	0

*Opportunity will be provided for remedial work for those who have deficiencies.

The 16 hours of shop work and drawing in the first year consisit of eight courses in the following:

Elements of Machine Woodwork I
Elements of Hand Woodwork I
Sheet Metal I
Electrical Work I
Freehand Drawing I
Machine Shop I
Printing I
Elements of Mechanical Drawing I

The shop work and drawing in the first year is required of all students. Recognition of incidental experiences by the student in the field of work covered by any of the courses in this group is made individually. For those entering with specific journeyman experience in trades, the freshman schedule is modified.

SECOND YEAR

			Sem. Hrs.
English	346	Expository Writing	2
English	223	Speech II	2
Mathematics	313	Trignometry III	3
Education	203	Plans & Instructional Material	2
Education	357b	Administration & Organization I	2
Social Science	201	Economics I	3
Chemistry	115	Chemistry I	5
Physical Education	101	Hygiene	1
Industrial Education	(See List)	Shop, Drawing, Design	12

Note: Qualified students may take Advanced Composition or Journalistic Writing, in place of Speech II.

The selection of technical courses in shop work, drawing and design in the second, third, and fourth years, is based upon continuous survey studies. The choices in the second year continue the exploratory range begun in the first year and

begin the identification of fields of concentration in the technical work. The selections of technical courses in the third and fourth years are based upon the experiences of the student in the first and second years, a detailed study of the trends in educational requirements as evidenced in the distribution in calls for teachers, and continuous survey studies of technological, structural, and functional change in modern industry. The results of these studies are used in teacher training provision for industrial education instruction in the public schools for general education, consumer preparation, and producer preparation. Selections of courses are combinations made from the following:

Carpentry I, II, III
Cabinetmaking I, II, III
Patternmaking I, II, III
Woodturning I
Furniture Upholstery I, II
General Woodwork I, II, III
Boat Building I, II
Painting and Decorating I, II
General Mechanics I, II
Home Craft and Repair Work
Industrial Mechanics I
Auto Mechanics I, II, III, IV
Foundry I, II, III
General Metal I, II
Oxy-acetylene and Electric Welding
Sheet Metal II, III, IV
Machine Shop II, III, IV
Architectural Drawing I, II, III, IV, V
Freehand Drawing II
Machine Drawing I, II, III, IV
General Drawing I, II
Mechanical Drawing II
Printing II, III, IV, V, VI, VII
Masonry I, II
General Building Construction I
Electrical II, III
House Furnishing I

Those who wish technical courses in shopwork, drawing, or design for preparation for technical or junior executive positions in industry will find selections from the technical courses particularly applicable.

THIRD YEAR

English	216	Survey of English Literature	2
Physics	421	Physics I	5
Social Science	301	Economic History of the U. S.	3
Education	357a	Administration and Organization II	2
Education	222	Principles of Secondary Education	2
Education	209	Psychology	4
Education	408a	Observation and Methods	2
Education	408c	Student Teaching	2
General Electives			4
Industrial Education	(See List)	Shop, Drawing, Design	6

FOURTH YEAR

Social Science	414	Labor Movements and Problems	3
Additional Science			3
General Electives			6
Education Electives			8
Education	408c	Student Teaching	2
Industrial Education	(See List)	Shop, Drawing, Design	10

Electives

Supplementary licenses to teach subjects in addition to industrial subjects are based on electives selected. In addition to the major in industrial education, students are required to arrange their selections of electives to complete one academic minor and are advised to complete a second minor. Fifteen semester hours of work in a given subject matter field constitutes a minor.

Education Electives

Visual Education	2
*Vocational Guidance	2
History of Education	2
Educational Measurements	2
Adolescent Psychology	2
Theory and Organization of the General Shop	2
Social Education	2
*The Part-Time School	2
*Teaching Trade and Industrial Subjects in the Part-Time School	2

(*See Wisconsin State Board of Vocational Education classification requirements.)

General Electives
English

Novel	2
Shakespeare	2
Poetry	2
Dramatic Coaching	2
Advanced Composition	2
Journalistic Writing	2
Short Story Writing	2

(Qualified students may take Adv. Comp. or Jour. Writing in substitution for Speech II.)

History and Social Science Minor

Students desiring to complete a social science minor should select courses from the following group in sufficient amount to complete fifteen semester hours in social science, counting social science courses included in the required groups.

Principles of Sociology or Educational Sociology	3
American Politics	2
Modern History	3
Recent U. S. History	3
Social Problems	2
Economics II	2
Contemporary Civilization	6
Social Psychology	2

Science Minor

Students desiring to complete a science minor should select courses from the following group in sufficient amount to complete fifteen semester hours in science, counting science courses included in the required groups.

Physics II	3
Physics III	3
Chemistry III (Chemistry of materials)	3
Organic Chemistry	3
Biology	3
Bacteriology	3
Physiology	3
Teaching of Science	2
Quantitative Chemical Analysis	3

Mathematics

Mathematics IV	3

Music

A maximum of two semester hours of music may be included in the academic electives to count toward graduation requirements.

Solfeggio	1
Harmony Ia	1
Harmony Ib	1
Harmonic Analysis	1
Theory	1
Conducting	1
Men's Glee Club	1
Band	1
Orchestra	1

Coaching

Technique of Coaching Football	1½
Technique of Coaching Basket Ball	1½

COOPERATIVE WORK

An expanding program of opportunity for cooperative work for students in the Division of Industrial Education is being developed. This work is of two types, teaching and shop experience. In the supervised teaching which all students must take in the professional group opportunity is offered at The Stout Institute for such teaching in grades 5 to 12 in the Menomonie Public Schools and in the day and evening classes of the Menomonie Vocational School. Through special arrangements teaching experience in certain other types of schools outside of Menomonie is available for a limited number of students. Through these opportunities, in addition to those on the campus, all types of teaching positions open to Stout graduates are available for supervised teaching during the training period.

All students in the Division of Industrial Education select certain major and minor lines of work in shop work and drawing. Opportunity for advanced students to spend some time in certain selected industries securing practical production experience is available. The scope of such shop experience and the kinds and types are being constantly expanded. During the school year 1938-39, such work will be available for students majoring in printing, woodworking, and possibly in certain other lines if conditions permit. The purpose of such work is to give the students modern shop experience in the industry in those phases of work which are not completely represented on the campus. A special schedule is provided for journeymen desiring teacher training in preparation for entering teaching in vocational schools. The schedule, designated as the vocational special, is open only to journeymen. Students who are journeymen and also high school graduates may take the work included in the schedule and additional work leading to the Bachelor of Science degree if they so desire. The arrangement of the schedules for the first two years for the vocational special classification follows:

Schedules for Students Selecting the Vocational Special Classification

FIRST YEAR

			Sem. Hrs.
Industrial Education	(See List)	Shop, Drawing, Design	10
English	102 a-b	English Composition	6
Social Science	105	American Government	2
Social Science	103	American History	2
Social Science	301	Economic History (Ind'l)	3
Education	357b	Organization of Industrial Education	2
Education	209	General Psychology	4
Education	304	The Part-Time School	2

SECOND YEAR

			Sem. Hrs.
Industrial Education	(See List)	Shop, Drawing, Design	12
English	106	Speech I	2
Social Science	414	Labor Movements and Problems	3
Social Science	307	Social Psychology	2
Social Science	201	Economics I	3
Social Science	303	Economics II	2
Education	408b	Student Teaching	2
Education	407	Teaching Trade and Industrial Subjects in the Part-Time School	2
Education	401	Vocational Guidance	2
Hygiene	101	Hygiene	1

This schedule of work outlined for the Vocational Special student is closely articulated with the classification requirements of the Wisconsin State Board of Vocational and Adult Education. These requirements are as follows:

For the purpose of measuring the attainment and the progress of the part-time schools of the state the Wisconsin State Board of Vocational and Adult Education, with the aid of the local directors, has set up certain standards of preparation and experience for each phase of part-time school teaching and is classifying part-time school teachers on the basis of these standards.

WISCONSIN STATE BOARD OF VOCATIONAL EDUCATION CLASSIFICATION REQUIREMENTS

Teachers of Trade and Industrial Subjects
Junior Classification

Junior Classification is granted to and held by

I. All teachers of trade and industrial subjects employed in the part-time schools of Wisconsin prior to January 1, 1926, who

(a) Are not yet qualified to hold a higher classification.

(b) If not already with a record of successful experience in the vocation taught for at least three years beyond the completion of apprenticeship, or the equivalent experience, spend one summer, or the equivalent, during each three-year period in practical work in the trade or occupation indicated until such record shall total three full years.

(c) Have agreed to and actually do spend one summer, or the equivalent, during each three-year period in professional improvement along the lines laid down for securing Senior A Classification and approved by the local board of vocational education and the State Board of Vocational and Adult Education. At least six credits must be earned over each three-year period. The following courses must be taken first:

1. The Part-Time School ..... 2 sem. hrs.
2. Teaching Trade and Industrial Subjects in the Part-Time School ..... 2 sem. hrs.

Note: Three-year periods mentioned above are those ending as of August 31, 1938 - 1941 - etc.

II. All teachers of trade and industrial subjects employed in the part-time schools of Wisconsin on or after January 1, 1926, who

(a) Are not yet qualified to hold a higher classification.

(b) If not already with a record of successful experience in the vocation taught for at least three years beyond the completion of apprenticeship, or the equivalent experience; or have had successful experience in the vocation taught for at least one and one-half years beyond the completion of ap-

prenticeship, or the equivalent experience, and have agreed to and actually do spend one summer, or the equivalent, during each two-year period of practical work in the trade or occupation indicated, until such record shall total three full years.

(c) Have agreed to and actually do spend one summer, or the equivalent, during each two-year period in professional improvement along the lines laid down for securing Senior A Classification and approved by the local board of vocational education and the State Board of Vocational and Adult Education. At least six credits must be earned over each two-year period. The following courses must be taken first:

1. The Part-Time School ..... 2 sem. hrs.
2. Teaching Trade and Industrial Subjects in the Part-Time School ..... 2 sem. hrs.

Note: Two-year periods mentioned above are those ending with the second August 31st after the teacher enters upon his work in the part-time school and all subsequent two-year periods.

Senior B Classification

Senior B Classification is granted to all teachers of trade and industrial subjects employed in the part-time schools of Wisconsin prior to January 1, 1926, who:

(a) Are not yet qualified to hold Senior Classification.

(b) Have completed five years of successful teaching of the trade and industrial subject indicated in the part-time schools of Wisconsin

(c) Have completed one summer, or the equivalent, in professional improvement. At least six credits must be earned in courses approved by the local board of vocational education and the State Board of Vocational and Adult Education. The following courses must be taken first:

1. The Part-Time School ..... 2 sem. hrs.
2. Teaching Trade and Industrial Subjects in the Part-Time School ..... 2 sem. hrs.

Senior B Classification will be extended as long as the possessor

(a) Teaches successfully in the part-time schools of Wisconsin the trade and industrial subject indicated.

(b) If not already with a record of successful experience in the vocation taught for at least three years beyond the completion of apprenticeship, or the equivalent experience, spends one summer, or the equivalent, during each three-year period in practical work in the trade or occupation indicated until such record shall total three full years.

(c) Has agreed to and actually does spend one summer, or the equivalent, during each three-year period in professional improvement along the lines laid down for securing Senior A Classification and approved by the local board of vocational education and the State Board of Vocational and Adult Education. At least six credits must be earned over each three-year period. The following courses must be taken first:

1. The Part-Time School ..... 2 sem. hrs.
2. Teaching Trade and Industrial Subjects in the Part-Time School ..... 2 sem. hrs.

Note. Three-year periods mentioned above are those ending as of August 31st, 1938 - 1941 - 1944 - etc.

Senior A Classification

Senior A Classification is granted to and held by all teachers of trade and industrial subjects who meet the following requirements:

(a) Successful experience in the vocation taught for at least three years beyond the completion of apprenticeship, or the equivalent experience.

(b) Successful teaching experience of the trade and industrial subject indicated for not less than three years in the part-time school; one of these three years must be in Wisconsin.

(c) Completion of two years of college work in an approved teacher training institution, or the equivalent training.

Note: Time spent by a person without practical experience in a trade or technical school learning elementary processes, if applied on the apprenticeship period mentioned above, cannot be counted here. This two years of school training is to be in addition to the learning of the elementary trade or industrial processes.

(d) Completion of the following courses, which may be included in the two years of college training reqiured under (c) above, or the equivalent specific training.

1. The Part-Time School ..... 2 sem. hrs.
2. Teaching Trade and Industrial Subjects in the Part-Time School ..... 2 sem. hrs.
3. Educational Psychology ..... 2 sem. hrs.
4. Vocational Guidance ..... 2 sem. hrs.
*5. Problems in Teaching Trade and Individual Subjects in the Part-Time School ..... 2 sem. hrs.
6. Elementary Economics ..... 4 sem. hrs.
7. Social-economic Electives ..... 4 sem. hrs.

*This course cannot be taken for classification credit until the teacher has a record of three years experience in the part-time school.

Unclassified

All teachers of trade and industrial subjects who do not have the qualifications for any of the ranks of classification as herein set up shall be designated as Unclassified.

Note: Four credits of graduate work done by a candidate for a higher degree is accepted in lieu of the six-credit total required throughout these standards.

Home Economics

The broadened concept of home economics as a functional curriculum has to do with the understandings and abilities needed in the development and maintance of a satisfied home and family life, which most educators believe is an area of major importance. At the college level such a curriculum should have as its purposes the centering of all its activities about family life, so that the student will become sensitized to the social value of the home and family. In order to accomplish this, the curriculum should offer a wide range of contacts in fields of general social interests, of arts and sciences closely related and needed for studying problems of family life, as well as the courses in the field of home economics. It should also propose to meet the larger personal and social needs of students and offer opportunity for worthwhile training in the professional fields of home economics.

The curriculum in home economics at The Stout Institute has been developed with the idea that real learning is more than fact acquisition and that the student gains most from her education through self activity in the study of her own problems as related to family and community life. In establishing the curriculum, group thinking of faculty and students has been used to discover areas of needs and ways of establishing and achieving desired goals in these areas. Closer interrelationships of the departments in the Division of Home Economics have been accomplished, and a correlated program in home economics, academic fields and professional fields has been developed. Through this program students will be helped to see more clearly the relationships existing among the various parts of the curriculum.

Throughout the four-year program, students are given an opportunity for cumulative development in a better understanding of family life problems, beginning with the emphasis in the freshman year on understandings needed for the effec-

tive personal development of the student, and continuing in the following years with studies of the family and its place in the social order.

The curricular offerings at The Stout Institute are designed to prepare the student for successful activities in the homemaking field, and also to provide opportunities for study and experience in professional responsibilities in the fields of teaching, commercial home economics, dietitian interneships in hospitals, and other interesting lines of professional work.

CURRICULUM IN HOME ECONOMICS

Requirements for a Bachelor of Science Degree in Home Economics Education and a Wisconsin license for teaching home economics are included in this program.

The total requirement is 124 semester hours. Home Economics courses totaling a minimum of 40 semester hours as a major, and an academic minor of 15 semester hours must be selected. Students are urged also to complete a second academic minor. Academic minors may be in science, English, social science, or art.

Students interested in institutional management and hospital dietetics may substitute courses meeting requirements of the American Dietetic Association for the advanced courses in education.

Reasonable modifications of requirements may be made, depending upon students' abilities, interests and needs.

First Year

	Sem. Hrs.
*English.....102a-b, 106	8
Biological Science 122, 214	6
Social Science.....103, 105	4
Home Economics and Art Core	14
(Art 106a, 220, HE 102a-b, 112, 114, 116)	
Physical Education 128	0

*Freshman students who fail in English entrance tests will be scheduled in English 0 for the first semester.

Second Year

	Sem. Hrs.
**English .....223 or 302 or 439, 216	4
Chemistry.....115, 208	9
Social Science ..... 201, HE 317	5
Home Economics and Art Core	14
(Art 106b, 334, HE 212, 218, 230)	
Physical Education 228	0

*Sophomores 1938-39 must register for Physiology 214, Art 220 instead of Art 106b and Chemistry 115.

**English 233, 302, 439 to be selected upon recommendation of English department.

Third Year

	Sem. Hrs.
Education 209, 320, 408, 424	13
Social Science 309, 326	6
Home Economics 403	3
Electives	10
*Education 304, 413 are required by the State Board of Vocational and Adult Education for all teachers of homemaking in Part-Time and George-Deen Schools	4

Fourth Year

Requirements for Teachers	Sem. Hrs.
Education 222, 410, 408	6
Electives	24
*Education 304, 413 are required by the State Board of Vocational and Adult Education for all teachers of homemaking in Part-Time and George-Deen Schools.	4
Requirements for Institutional Managers and Dietitians	
Chemistry 322, Bacteriology 306 Physiology 362	8
Home Economics 308, 310, 328, 418, 438, 452	24

DESIRABLE ELECTIVES FOR HOME ECONOMICS MAJORS

Home Economics Courses	Sem. Hrs.
Nutrition and Dieteics	3
Diet Therapy	3
Institution Food Preparation	3
Institution Administration	3
Applied Institution Management	3
Child Nutrition	2-3
Meal Management	3
Experimental Foods	3
Food Demonstrations	2
Clothing Economics	2
Clothing Problems	2
Applied Dress Design	2-3

History of Costume	2
Textile Study	2
Children's Clothing	2
Physical Development and Welfare of the Young Child	2
Standards of Living	2
Housing	2
Advanced Design	2
Seminar in Art	2
Problems in House Furnishing	2
Art History and Appreciation	3
Economics of House Furnishing	3
Period Furnishings	3
Crafts	2-3

Academic Electives	Sem. Hrs.
Essay	1
Novel	2
Poetry	2
Dramatic Coaching	2
Bacteriological Problems	2-3
Physiological Chemistry	3
Quantitative Chemistry	3
Physics I	5
Physics II	3
Recent U. S. History	3
Social Problems	2
Labor Movements and Problems	3
Contemporary Civilization	3

Teachers of Vocational Homemaking
Senior B Classification

Senior B Classification is granted to all teachers of homemaking employed in the part-time schools of Wisconsin prior to January 1, 1926, who:

(a) Are not yet qualified to hold Senior A Classification.

(b) Have completed five years of successful teaching of homemaking in the part-time schools of Wisconsin.

(c) Have completed one summer, or the equivalent, in professional improvement. At least six credits must be earned in courses approved by the local board of vocational education and the State Board of Vocational and Adult Education.

The following courses must be taken first:

1. The Part-Time School ..... 2 sem. hrs.
2. Teaching Homemaking in the Part-Time School ..... 2 sem. hrs.

Senior B Classification will be extended as long as the possesor

(a) Teaches homemaking successfully in the part-time schools of Wisconsin.

(b) If not already with a record of practical experience in homemaking involving some responsibility for at least twelve months, or the equivalent experience, spends one summer, or the equivalent, during each three-year period in practical homemaking as indicated above until such record shall total twelve months.

(c) Has agreed to and actually does spend one summer, or the equivalent, during each three-year period in professional improvement along the lines laid down for securing Senior A Classification and approved by the local board of vocational education and the State Board of Vocational and Adult Education. At least six credits must be earned over each

three-year period. The following courses must be taken first:

1. The Part-Time School and Its Problems ..... 2 sem. hrs.
2. Teaching Homemaking in the Part-Time School ..... 2 sem. hrs.

Note: Three-year periods mentioned above are those ending as of August 31, 1938 - 1941 - 1944.

Senior A Classification

Senior A Classification is granted to and held by all teachers of homemaking who meet the following requirements:

(a) Practical experience in homemaking involving some responsibility for at least twelve months, or the equivalent experience.

Note: Practical experience in homemaking involving some responsibility is considered to be:

1. Experience with responsibility for all homemaking activities such as would be the case were the housewife to be away or ill or the mother to die leaving full responsibility to be assumed by the candidate.
2. Experience as an employee in the home responsible for certain homemaking activities such as would be the case where the candidate works with and assists the housewife but usually has delegated or assumes responsibilities for definite activities.

Teacher Training Form I. V. S. R. Item B.

(b) Occupational experience in employment other than teaching or homemaking for at least three months, or equivalent experience.

(c) Successful teaching experience of homemaking for not less than three years in the part-time school; one of these three years must be in Wisconsin.

(d) Completion of a four-year college course with a home economics major in an approved teacher-training institution, or the equivalent training.

(e) Completion of the following courses, which may be included in the four years of college training required under (d) above, or the equivalent specific training.

1. The Part-Time School ..... 2 sem. hrs.
2. Teaching Homemaking in the Part-Time School ..... 2 sem. hrs.
3. Educational Psychology ..... 2 sem. hrs.
4. Vocational Guidance ..... 2 sem. hrs.

5. Problems in Teaching Homemaking in the Part-Time School ..... 2 sem. hrs.
6. Economics I (Elementary) ..... 4 sem. hrs.
7. Socio-economic Electives ..... 4 sem. hrs.

"The foregoing requirements apply to teachers of vocational homemaking who are employed in the vocational or part-time schools of Wisconsin outside of Milwaukee."

Unclassified

All teachers of homemaking who do not have the qualifications for any of the ranks of classification as herein set up shall be designated as Unclassified.

Note: Four credits of graduate work done by a candidate for a higher degree is accepted in lieu of the six credits total required throughout these standards.

Courses

Summer Session Note:

Courses offered in the Summer Session are described in The Summer Session Bulletin. This is issued each April for the following summer and will be sent on request.

EDUCATION AND PSYCHOLOGY

Psychology

Psychology 209 Psychology

Discussion of such fundamental aspects of human behavior as intelligence, memory, learning, motivation, emotion, sensation, perception, thinking and imagination; relation of this knowledge to its physiological basis and an integration of this knowledge into a discussion of personality and its problems. Emphasis is placed throughout on how teachers may use this knowledge to aid people in reaching their highest development.

Sem. I, II.

Mr. Smith Credit: 4

Psychology 350 Adolescent Psychology

Prerequisite: Psychology 209.

A study of the development capacities of the pre-adolescent and adolescent child. The effect of heredity and environment on development. Discussion of the problems arising from poor development and of methods for aiding children to overcome their difficulties.

Sem. II.

Mr. Smith Credit: 2

Education 424 The Social and Mental Growth of the Preschool Child

Prerequisites: Psychology 209, and Senior Standing.

A study of the physical, mental, emotional, and social development of the child. Emphasis on habit formation, emotional control, and social adjustment.

Sem. I, II.

Mrs. Houston Credit: 3

Education

Education 203 Plans for Instructional Material

Prerequisites: Psychology 209 and Education 222

Factors underlying the appropriate selection and preparation of

instructional material in the industrial arts field, with the development of plans for effective presentation. Selected types of work prepared in a series of consecutive units for typical teaching situations. Unit analysis, preparation of instruction sheets, teaching plans.

Sem. I, II.

Mr. Brown Credit: 2

Education 222 Principles of Secondary Education

General introduction to present practice in secondary education including the historical devvelopment of the schools of this and certain European countries, the aims and functions of secondary education, the articulation of our educational system, the nature of the secondary school student and his problems, the function of guidance, the scientific study of the curriculum and extra-curriculum, teacher-community relationships and school costs.

Sem. I, II.

Mr. Smith Credit: 2

Education 320 Home Economics Education I

Prerequisite: Junior Standing.

Educational values of home economics, methods of classroom teaching, provisions for individual differences, evaluation of results of instruction.

This course must parallel Psychology 209 and Education 408.

Sem. I, II.

Miss Walsh Credit: 2

Education 410 Home Economics Education II

Prerequisite: Education 320.

Development of home economics curriculum in all day schools. Administrative problems of the department. Further professional development of the teacher.

Sem. I, II.

Miss Michaels, Miss Walsh Credit: 2

Education 342 Educational Activities of the Young Child

A study of the literature, music, and plastic and permanent play materials suitable for the young child. The student is given some opportunity for actual work with the materials in the Nursery School.

Sem. I. Credit: 2

Education 357b Administration and Organization of Industrial Education I

Prerequisite: Sophomore Standing.

Procedures in occupational and subject analysis for instructional use. Identification of pupil classifications in purpose, progress, ability, and interest as controls in the organization of industrial content in teaching. Unit, courses and curriculum planning. Identification and interpretation of instructional, administrative, and occupational factors to be recognized in planning and operating modern school shops.

Sem. I, II.

Mr. Bowman Credit: 2

Education 357a Administration and Organization of Industrial Education II

Prerequisite: Junior standing.

Definition of teacher's professional skill in analysis, selection, and teaching on the lesson level, subject level, and curriculum level with solutions of typical problems. Administrative practice analyzed in functional assignment of school operating responsibility; measurement of teaching and supervisory staffs; maintaining and developing the teacher's professional skill; functioning of the school system through continuous survey; the school budget and financial control; maintaining and controlling of buildings and equipment.

Sem. I, II.

Mr. Bowman Credit: 2

Education 360 Visual Education

Prerequisites: Junior Standing in Education and in technical series.

Studies and class discussions concerning educational significance, suitability and comparative values, and selection, preparation, and use of the various visual aids. Also the principal phases of administrative details common to a visual education bureau or center. Actual experiences are provided in planning visual aids for definite teaching purposes, in construction of lantern slides and other visual aids, and in the presentation of lessons aided by visual means.

Sem. I, II.

Mr. P. C. Nelson Credit: 2

Education 405 History of Education

Background of present day education. Elementary, secondary, and college education in the United States from the early colonial period to the present time. Purposes, curriculum, teachers' equipment, support, administration and supervision, methods, and legislation developed for each type of school.

Sem. I, II.

Mr. Curran Credit: 2

Education 408a Observation and Methods in Teaching Industrial Arts

Prerequisite: Psychology 209.

Observation of classes at work with written reports; preparation and presentation of lessons to the college class; meaning of education; teaching as a process; principles of learning; types of lessons; class and shop management; elements and conditions of easy control of pupils; punishments; personality of the teacher.

Sem. I, II.

Mr. Curran

Education 408b Student Teaching (Industrial Education).

Prerequisites: Education 203 and 408a and Junior Standing.

Observation and teaching of Industrial Education in different grades of the public schools. Preparation, use, and evaluation of courses of study, plans provisions for individual differences, teaching aids, tests. Some experience with various publicity techniques and with responsibility for the social and financial organization of the classes. Individual conferences with the supervising critic and group conferences with the Director of Practice.

Sem. I, II.

Mr. Curran and others Credit: 5-6

Education 408 Student Teaching in Home Economics

Prerequisites: Junior Standing.

Observation and teaching of home economics in different schools and on grade levels from elementary school correlation to adult classes. Study of home and community through home visiting, participating in community activities. Observation of and some experience in administration and organization of home economics

in large and small departments, in general and vocational education.

Sem. I, II.

Miss Walsh and others Credit: 6

Education 441 Educational Measurements

Prerequisites: Education 203 and 222, or Education 320.

Improvement of the written examination with special reference to validity, reliability, and objectivity. The course includes the present status, types, selection, characteristics, limitations, possibilities, use and interpretation of tests, as well as the conversion of raw scores and the distribution for the determination of grades. Emphasis is placed on the construction of informal objective tests so that the student may construct and use same when out in the field.

Sem. I, II.

Mr. Rich, Mr. Brown Credit: 2

Education 461 Statistics

Prerequisites: Senior Standing.

Includes methods of collecting, evaluating and recording statistical facts pertinent for the interpretation of data and the technique of drawing conclusions.

Sem. I, alternate years.

Mr. Rich, Mr. Brown Credit: 2

Education 480 Theory and Organization of General Shop

Prerequisites: Senior Standing (Junior standing permissible if student has senior standing in educational sequence).

The history of the general shop, including an analysis of the educational considerations, the identifications of all types of general shops with a study of each to include pupil classifications of boys and girls, equipment combinations, shop operating problems, including those of personal organization, stock room and store room organization and operation. Directed observation in the several types of general shops in The Stout Institute and assignments as assistants in student teaching practice classes in selected general shops. The identification of instructional methods, teaching devices, and preparation procedures in preparing instructional material. Indentification of related information, classifications, and sources.

Sem. I, II.

Mr. Brown, Mr. Bowman, and others. Credits: 2

Note: Men who have completed the six-hour requirement in

student teaching and the above course, will be permitted, so far as facilities allow, to take an additional two hours of student teaching in general shop work in the senior year and substitute this for two years of technical work in shop work, drawing, or design.

Education 304 The Part-Time School

Prerequisite: Junior Standing.

A general acquaintance course in the philosophy, organization, and administration of vocational and adult education for the out-of-school group. The following points are considered: history and development of the part-time school, both in Europe and America, with special attention given to Wisconsin; Federal and State laws affecting the part-time schools; the type of pupils in the part-time schools and their needs; desirable characteristics of the part-time school teacher; the work of the coordinator; home contacts; cooperation with outside organizations; cooperation with the Industrial Commission and Rehabilitation Division; the planning and care of equipment.

Sem. I, II.

Miss Johnson, Mr. Welch Credit: 2

Education 401 Vocational and Educational Guidance

The rise and development of the movement, with some attention to foreign progress; study of surveys and their application to the problem; analysis and evaluation of the use of intelligence and trade tests; careful consideration of personal functions and administration, in education, business, and industry; and preparation and classification of occupationl information for use in guidance and placement. Assigned reading, lectures, and preparation of term papers.

Sem. I, II.

Mr. Welch Credit: 2

Education 407 Teaching Trade and Industrial Subjects in the Part-Time School

Recognized principles of teaching applied to typical shop situations as found in the part-time school. Methods of teaching based upon the psychological aspects of learning as applied to both shop and related subjects. Topics considered are applied to both shop and related subjects. Topics considered are (1) the use of the lesson plan and job sheet; (2) the demonstration, both for the whole class and for the smaller group; (3) indivi-

dual practice, the follow-up on the demonstration; (4) assignment of reading and observation; (5) the notebook and note taking; (6) the lecture or class talk; (7) reports by pupils; (8) questioning; (9) checking and testing, examinations; (10) the use of models, charts, graphs, and diagrams; (11) the use of pictures of various kinds; (12) shop hygiene and safety; (13) management, routine, details, and discipline; (14) tool room procedure; (15) the maintenance of tools, apparatus, and equipment; and (16) the selection, care, and purchase of supplies.

Sem. I, II.

Mr. Welch Credit: 2

Education 413 The Teaching of Homemaking in the Part-Time School

Formulation of objectives based upon the personal needs of the vocational school girl; suitable methods adapted to the part-time school pupil and the adult homemaker.

Sem. I, II.

Miss Johnson Credit: 2

Education 443 Problems in Teaching Trade and Industrial Subjects in the Part-Time School

Prerequisites: For Junior teachers (Wisconsin State Board of Vocational and Adult Education), three years of teaching experience in the part-time shop classes of the Wisconsin Vocational Schools and the completion of two years of Training in an approved institution of college rank. Education 357b.

Individual work representing approved practice in the writing of text material that can be of immediate use in part-time classes. The writing of specific instruction sheets and the preparation of test material suitable for use in part-time classes.

Sem. I, II.

Mr. Welch Credit: 2

ENGLISH

English 0 English Composition

Sub-freshman English. Instruction and practice in the fundamentals of English, speech, and writing, especial emphasis upon spelling, punctuation, and the rudiments of English grammar. Designed for students who prove unprepared to take English 102. No credit. Students who are registered in English 0

may, with the consent of the instructor, be permitted to take an examination for credit in English 1.

Sem. I, II.

English 102a Composition

Training in the fundamentals of clear and correct expression; emphasis on expository writing and the organization of material.

Sem. I, II.

Miss Callahan, Mr. Grinnell, Mr. Ives, Mr. Price Credit: 3

English 102b Composition

Prerequisite: English 102a.

Training in the principles of effective writing; emphasis on descriptive and narrative writing; reading of books representative of the types of literature; acquisition of knowledge regarding the sources of reading.

Sem. II.

Miss Callahan, Mr. Grinnell, Mr. Ives, Mr. Price Credit: 3

English 302 Advanced Composition

Prerequisite: English 102b and consent of instructor.

Practice in honest, personal writing with emphasis on the development of style, and with friendly, exacting criticism. Reading with attention to what makes good writing. General class meetings and personal conferences.

Sem. I, II.

Mr. Grinnell Credit: 2

English 439 Journalistic Writing

Prerequisite: Composition 102b.

A course designed to develop skills in various types of journalistic writing and to acquaint the student with essential facts concerning newspapers and magazines. Classroom work, conferences, general writing, and writing for publication.

Sem. I.

Mr. Grinnell Credit: 2

English 304 Short Story

Prerequisite: English 102b

A study of the modern short story as developed in this country and on the continent. Reading stories of all types with critical examination. Some attention to writing the short story.

Sem. II.

Mr. Grinnell Credit: 2

English 216 Survey of English Literature

Prerequisite: English 102b.

A survey of English literature from Beowulf to the end of the nineteenth century.

Sem. I, II.

Miss Callahan — Credit: 2

English 346 Expository Writing

Prerequisite: English 102b

Reading of essays and current periodicals as a basis for discussion and writing.

Sem. I, II.

Miss Callahan — Credit: 2

English 402 The Novel

Prerequisite: English 216.

A study of the development of the novel with special regard to the novelists of the late nineteenth and twentieth centuries. Lectures, assigned readings, critical papers, and discussions.

Sem. I.

Mr. Grinnell — Credit: 2

English 404 Poetry

Prerequisite: English 216.

A study of contemporary American and British poetry. Lectures, assigned readings, critical papers, and discussions.

Sem. II.

Miss Callahan — Credit: 2

English 406 Shakespeare

Prerequisite: English 216.

A study of the chief comedies and tragedies of Shakespeare

Sem. I.

Miss Callahan — Credit: 2

English 106 Speech I

Practice in the elements of effective speaking. A variety of original speeches and criticisms.

Sem. I, II.

Mr. Ives — Credit: 2

English 223 Speech II

Prerequisite: English 106.

Advanced instruction for those who wish to attain greater

maturity in public speaking. Both classroom and public appearances.

Sem. I, II.

Mr. Ives — Credit: 2

English 444 Dramatic Coaching I

A study of the technique of play production; units of work cover acting, directing, make-up, lighting and stage equipment, and reading and selecting plays.

Sem. II.

Mr. Grinnell — Credit: 2

MATHEMATICS

Mathematics 207 College Algebra I

Fundamental processess and selected work in college algebra. Special efforts are made to give each student his maximum progress.

Sem. I, II.

Mr. Rich, Mr. Tustison — Credit: 2

Mathematics 211 College Algebra II

Prerequisite: Mathematics 207.

Continuation of Mathematics 207 including special work in logarithms and the slide rule.

Sem. I, II.

Mr. Rich, Tustison — Credit: 2

Mathematics 313 Trigonometry

Prerequisites: Mathematics 207 and 211.

Introduction to the elements of trigonometry. The solution of the right triangle. Variations of the trigonometric functions, the fundamental relations and functions of the sum and difference of angles. The solution of the oblique triangle. Slide rule and logarithmic calculations using the trigonometric functions in solving practical problems. One field problem in the use of the sextant or the transit.

Sem. I, II.

Mr. Rich, Mr. Tustison — Credit: 3

Mathematics 314 Analytic Geometry

Prerequisites: Mathematics 207, 211, 313.

Algebraic treatment of geometry. A graphical analysis of the straight line, the circle and conic sections in general.

Sem. II, 1939-40, 1941-42, etc.

Mr. Rich — Credit: 2

Mathematics 315 Calculus

Prerequisites: Mathematics 207, 211, 313, and 314 or consent of the instructor.

A course of differential and intergral calculus with practical application. A year's course, two hours each semester.

Sem. I and II, 1938-39, 1940-41, etc.

Mr. Rich — Credit: 4

MUSIC

Music 150 Solfeggio

The study of solfeggio, which includes ear training, is the foundation of muscial education. Such fundamental principles as rhythmic notation, measure, three against two, tonal notation and relations, intervals and inversions, diatonic and chromatic scales, signatures, and rhythmic and melodic dictation are studied.

Sem. I.

Mr. Cooke — Credit: 1

Music 151 Harmony 1a

Prerequisite: Music 150.

A detailed study of cord construction. All triads in major and minor modes, and dominant sevenths and their inversions. Dispersed harmony. Keyboard work and the playing of cadences.

Sem. II.

Mr. Cooke — Credit: 1

Music 152 Harmony 1b

Prerequisite: Music 151.

Introduction to counterpoint; passing tones; contrapuntal treatment of the harmonic material of Harmony 1a. Harmonization of scales and simple melodies at the keyboard.

Sem. I.

Mr. Cooke — Credit: 1

Music 153 Harmonic Analysis

Prerequisites: Music 151 and 152.

This course is invaluable to all students who expect to become leaders of choral and instrumental groups. It explains the harmonic structure of musical composition.

Sem. II.

Mr. Cooke — Credit: 1

Music 160 Theory

Prerequisites: Music 151 and 152.

Acoustics; musical terminology; notation; ornamentation; the Gregorian modes; description of the orchestral instruments; analysis of music forms, including the song forms. Also practical work in elementary orchestration. This course summarizes the knowledge necessary to every teacher and professional musician.

Sem. I.

Mr. Cooke — Credit: 1

Music 162 Conducting

Prerequisites: Junior Standing. Participation in at least one of the musical organizations of the college.

Technique of conducting. Chorus and orchestra from viewpoint of prospective conductor. Principles of interpretation. Score reading and transposition. Care and classification of voices.

Sem. II.

Mr. Cooke — Credit: 1

Choral Organizations

Membership in the glee clubs is open to all students. Try-outs are held at the beginning of the school year, and a waiting list provides opportunity and protection for those desiring admittance at a later date. Several concerts are sung including broadcasts and those given in cities throughout Wisconsin and Minnesota. Strict training is provided in the fundamental principles of chorus singing through sectional as well as regular weekly rehearsals. Several times during the year the two clubs unite, forming a mixed chorus of over one hundred voices. All concerts are sung from memory.

Music 164 Men's Glee Club

The Men's Glee Club consists of 40 members.

Full year.

Mr. Cooke — Credit: 1

Music 165 Women's Glee Club

The Women's Glee Club consists of 65 members.

Full year.

Mr. Cooke — Credit: 2

Music 166 The College Band

Membership in the college band is open to all students who have had training and experience in the playing of a band instrument.

The band's membership consists of 45 players, including the drum major. On parade the band is preceded by the color bearers and the color guard; at football games the band maneuvers between halves, spelling out letters and executing other military drills. Formal concerts are given throughout the year. (No credit allowed if credit has already been given in Orchestra)
Full year.
Mr. Cooke Credit: 2

Music 167 The College Orchestra

The orchestra is an organization of twenty-five members with symphonic instrumentation. Rehearsals are held once a week and special attention is given the string section in private rehearsals. This organization makes public appearances on and off the campus, and provides the accompaniment to the larger choral works presented by the combined glee clubs.
(No credit allowed if credit has already been given in Band).
Full year.
Mr. Cooke Credit: 2

PHYSICAL EDUCATION AND COACHING

Physical Education 127 Physical Education I (Men)

Wide range of free exercises, calisthenics, floor work, and games. In season, work in athletics. Physical efficiency tests to determine individual improvement. Individuals will conduct classes in Physical Education. Life saving tests to qualified individuals who desire Red Cross certificates.
Sem. I, II. Credit: 1
Mr. Crawford (0-2)

Physical Education Intramural Sports (Men)

A complete program of all sports in season consisting of an "Athletics for All" aim.
Mr. Crawford

Physical Education 263 Basketball Coaching

Prerequisite: Physical Education 127 (9 weeks).
Instruction in individual and team fundamentals: Passing, goal throwing, dribbling, turns, stops, special drills, etc. Team play: Styles of offense and defense used by the leading coaches. Problems of organization and administration: Schedules, training, selection of material, and the purchase and care of equipment.
Sem. I, 2nd quarter; Sem. II, 3rd quarter. Credit: 1½
Mr. Crawford (2-2)

Physical Education 265 Football Coaching

Prerequisite: Physical Education 127 (9 weeks)
Instruction in individual and team fundamentals: Tackling, blocking, kicking, passing, special drills, etc. Team play: Styles of offense and defense used by the leading coaches. Problems of organization and administration: Schedules, training, selection of material, and the purchase and care of equipment.
Sem. I, 1st quarter; Sem. II, 4th quarter. Credit: 1½
Mr. Crawford (2-2)

Hygiene 101 School Hygiene and First Aid

Hygiene of the teacher, pupil and curriculum. Personal hygiene problems of teacher and pupils. Survey of school buildings, grounds, heating, lighting, ventilation, safety and janitorial methods. Survey of hygiene of food, water, air, climate, sewage disposal, common communicable and non-communicable disease, and vital statistics. First aid and emergency treatment of common accidents and injuries. Safety education and precautions. Detection of physical defects and remedial measures.
Sem. I, II.
Mr. Crawford Credit: 1

Physical Education 128 Physical Education I (Women)

First year physical education is planned to meet the needs of the women students. Careful observation shows that these are along the lines of personal development, present recreation, and training for future recreation.
Four quarters of physical education are required of each freshman woman. One of these quarters must be given over to a course called "Health and Posture Training." One other activity required of each girl is swimming. These two courses may be taken at any time during the first year. The first and fourth quarters should be utilized for outdoor work.
The activity during the remaining two quarters may be selected by the students according to their interests and abilities. The activities from which they may choose are as follows: field hockey, tennis, archery, basketball, volleyball, bowling, folk dancing, kittenball, badminton, deck tennis, and shuffleboard.
The women differ so much in their ability in swimming that the work is given in separate classes to beginner, intermediate, and advanced groups.
Sem. I, II. Credit: 0
Miss Antrim (-2)

Physical Education 228 Physical Education II (Women)

Sophomore women take four quarters of physical education but only one of these is a requirement, swimming. This is an unusually good activity for the development of health and beauty of form. It exercises all muscles equally well and leads to later enjoyment and continued activity.

Each girl is urged to select one other individual sport such as tennis, golf, bowling, or archery to be used as a hobby during the junior and senior years.

Each individual is also encouraged to take at least one quarter of an activity in which team play is necessary. All should develop the social principals of working as a team unit.

So many electives allow for variations in interests and abilities and in most cases lead to a higher standard of work.

The electives for the sophomores are: field hockey, tennis, archery, basketball, volley ball, bowling, dancing, kittenball, badminton, deck tennis, and shuffleboard.

Sem. I, II. Credit: 0

Miss Antrim (-2)

Physical Education 380 Theory and Principles of Physical Education for Women Teachers

Prerequisite: Physical Education 128.

A course for women who wish to teach physical education in connection with other subjects. It is a careful study of the aims and objectives of modern physical education as applied to work in schools, camps, and supervised playgrounds. The material includes formal and informal methods of teaching, the presentation of the varied new physical education programs. the related purpose of physical examinations and personal hygiene, a study of the organization and administration of gymnasiums, playgrounds, recreation centers, swimming pools. Seasonal programs adapted to groups of various ages are formulated for indoor and outdoor work.

Sem. I, II. Credit: 2

Miss Antrim 1 hr. lecture, 2 hr. lab.

Physical Education Correction Individual Gymnastics

Special diagnosis and prescription of exercises for correction of minor physical deficiencies which are noted at the time of the physical examination by the college physician. In this class, each student is considered as an individual, special case. It is primarily for those who wish to improve their posture,

overcome detriments to their health, e.g., weak arches, weak abdominal muscles, indigestion, constipation, overweight, underweight, poor circulation, sleeplessness, weak heart, etc. A silhouettograph camera helps to determine and verify posture needs, preceding corrective work.

A corrective room in the gym has been especially equipped with a triple mirror, mats for exercise, beds for students who need regular rest and relaxation periods to build up reserve strength and vitality for better health and efficiency.

Sem. I, II. Credit: 0

Miss Antrim Hours arranged

Physical Education Recreational Sports (Women)

The Women's Athletic Association sponsors various sports which promote interest and enthusiasm in recreational activities and intra-mural competition. There is created an opportunity for every girl in school to participate in various recreational activities, and in "play for play's sake."

In the list of fall interests, a girl may choose field hockey, archery, tennis, or organized hiking. Winter diversions include volley ball, basketball, bowling, shuffleboard, deck tennis, life saving methods, swimming, diving, ice skating, and badminton. Spring activities include archery, tennis, and kittenball. At least one afternoon a week the swimming pool is open for women. Two evenings a week they may use the gym floor for recreational activities and intramural sports.

Miss Antrim

PHYSICAL SCIENCES
BIOLOGY

Biology 122 General Biology

Properties of protoplasm, classification of plants and animals, structure and nutrition of forms of plant life, the cell in development and inheritance, reproduction, introductory studies in embryology and comparative anatomy, the use of the microscope.

Sem. I, II. Credit: 3

Miss Bachmann, Miss Hale (1-4)

Bacteriology 206 General Bacteriology

Prerequisite: Biology 122.

Some of the morphological and physiological characteristics of yeast, molds, and bacteria; methods used in the culture and

microscopic examination of micro-organisms; effects of environment; introductory studies in comparative analysis of air, water, and milk; efficiency of insects as carriers of micro-organisms.

Sem. II. Credit: 3
Miss Bachmann (1-4)

Biology 214 Physiology and Anatomy

Mammalian anatomy based on dissections of the cat, the sheep heart, brain and eye, the foetal pig. Histological studies. Survey of the fundamental physiological processes of the animal body, with special reference to the human.

Sem. I. Credit: 3
Miss Hale (2-2)

Biology 362 Advanced Physiology

Prerequisite: Biology 214.

Histological and quantitative studies on human blood. Experiments on the frog and turtle hearts and on muscle-nerve preparations of the frog. Experiments on the human body.

Sem. II. Credit: 2
Miss Hale (1-2)

Bacteriology 420 Bacteriological Problems

Prerequisites: Biology 122, Bacteriology 206.

Applications of bacteriology to the problems concerning conservation and promotion of community health; pure water supplies, sewage disposal, food handling, milk sanitation, food spoilage and food poisoning, control of infectious diseases, and public health organizations. Students may take the lectures without the laboratory.

Sem. I. Credit: 2 or 3
Miss Bachmann (2-2)

CHEMISTRY

Chemistry 115 Inorganic Chemistry I

Chemical viewpoint, laws, theories, principles and atomic structure as related to chemical reaction. The study of non-metallic elements followed by that of metals.

Sem. I (women), Sem. II (men). Credit: 5
Miss McCalmont, Miss Leedom (2-6)

Chemistry 208 Organic Chemistry

Prerequisite: Chemistry 115.

Influence of structure on chemical behavior; isomerism; the study of hydrocarbons, alkyl halides, alcohols, ethers, aldehydes and ketones, acids and esters, fats, soap, carbohydrates and proteins.

Sem. II Credit: 4
Miss Leedom (2-4)

Chemistry 322 Biochemistry

Prerequisites: Chemistry 208, Biology 214.

Study of colloids; proteins and protein digestion products; of the intermediary metabolism of carbohydrates, fats, and proteins in the animal body. Qualitative and quantitative determinations of the end-products of metabolism.

Sem. I, II. Credit: 3
Miss Hale (1-4)

Chemistry 438 Quantitative Analysis

Prerequisite: Chemistry 115.

Use of analytical balance, preparation of standard solutions both gravimetrically and volumetrically, typical food analysis for women and inorganic determinations for men. Emphasis of technique and accuracy, final application of theory learned in beginning courses.

Sem. II. Credit: 3
Miss McCalmont (1-4)

Chemistry 445 Chemistry of Materials

Water and its relations to boiler use, fuels—solids, liquids, gaseous,—lubricants, rubber, paints, varnishes, stains, building materials—cement, tile, brick, stones—ferrous and non-ferrous alloys.

Sem. II. Credit: 3
Miss McCalmont (2-2)

PHYSICS

Physics 421 Physics I

Electricity. Mechanics. Heat. Practical application of general physical laws is stressed in special laboratory problems, or demonstrated by apparatus or machines in actual use. Content

applicable to the needs of prospective teachers in industrial education, home economics, or the sciences.
Sem. I, II. Credit: 5
Mr. Tustison, Mr. Rich (3-4)

Physics 423 Physics II

Prerequisite: Physics 421.

Sound and Light, a continuation of Physics I, completing the study of the general laws of Physics. The subjects are covered through lecture and related laboratory work. Content is especially adapted to prospective teachers of physics and general science.
Sem. I, II. Credit: 3
Mr. Tustison, Mr. Rich (2-2)

Physics 425 Physics III

Prerequisites: Physics 421 and 423, Mathematics 207.

Strength of materials and the materials of construction in machine and building trades. Problems in wood, steel, and concrete construction. Standard and special tests in various grades of iron and steel; building materials such as cement, brick, and woods of various kinds, glues, screws, nails, and other fasteners.
Sem. I, II. Credit: 3
Mr. Good (2-2)

SOCIAL SCIENCES

Social Science 103 American History

An interpretative survey course with emphasis on the period since the Constitutional Convention. An effort to interrelate the various factors, economic, social, political, and religious which have contributed to the development of American society.
Sem. I, II. Credit: 2
Mr. Shafer, Mr. Dawley

Social Science 105 American Government

Critical review of the machinery and functions of national, state, and local governments. Emphasis on proposed reforms of governmental machinery and an analysis of the significance of citizenship.
Sem. I, II.
Mr. Dawley, Mr. Shafer Credit: 2

Social Science 201 Economics I

Fundamental principles of economic science; their application to

the life of the individual in the modern economic and social order.
Sem. I, II.
Mr. Dawley Credit: 3

Social Science 301 Economic History of the United States

Prerequisite: Social Science 201.

A study of the economic evolution of the United States since colonial times. Approximately two-thirds of the course is devoted to the period since the Civil War. A special emphasis is placed on the development of economic problems and the foundations of modern industry. Students are required to analyze these problems and to formulate tentative remedies.
Sem. I, II.
Mr. Price Credit: 3

Social Science 303 Economics II

Prerequisite: Social Science 201.

Continuation of Economics I, including the study of a selected group of modern economic problems.
Sem. II Credit: 2*
Mr. Dawley

Social Science 305 Modern History

Prerequisite: Social Science 103.

The study of significant events and movements in world history since 1815. The period from 1815 to 1871 is dealt with only as a background for the study of the modern state. The emphasis throughout the course is upon the motivating forces of nationalism and liberalism, especially as they relate to the evolution of the distinctly contemporary states and governments and to international relations.
Sem. I, II.
Mr. Shafer Credit: 3

Social Science 307 Social Psychology

Prerequisites: Education 124 or 125.

A study of human nature, attitudes, and values as a result of social interaction and interstimulation.
Credit: 2

Social Science 309 Principles of Sociology

Fundamental principles and elements of sociology, designed to give the student a comprehension of social forces, social process-

es, and social structures in modern life.
Sem. I, II.
Mr. Price Credit: 3

Social Science 326 Problems of the Family

Study of social problems of family life. Special emphasis on development and maintenance of satisfactory family relationships. Should parallel Home Economics, Education 424, Social Science 309.
Sem. I, II.
Miss Michaels and others Credit: 3

Social Science 409 Recent History of U. S.

Prerequisite: Social Science 103.
A study and interpretation of American history since the Civil War. Emphasis is put on those developments which best help explain present United States conditions. Some time is devoted to the study of recent world problems in which the United States has played a part.
Mr. Shafer Credit: 3

Social Science 411 Social Problems

Prerequisite: Social Science 309.
Modern social problems selected from the following group: population and immigration, poverty and dependency, marriage and the family, classes and races, abnormality and crime. An attempt is made to ascertain possible solutions to these problems from the viewpoint of social control and individual adjustments.
Sem. II.
Mr. Price Credit: 2*

Social Science 414 Labor Movements and Problems

Prerequisite: Social Science 104, 201.
An analysis and interpretation of the historical background of the modern labor movement, and of fundamental causes of and proposed solutions to contemporary labor problems such as unemployment, wages, hours, and political activity.
Sem. I, II.
Mr. Shafer Credit: 3

Social Science 417 American Politics

Prerequisites: Social Science 103, 105.
Analysis of modern political parties, nominating methods, campaigns, elections, practical politics in legislative bodies, machines and bosses, and other divisions of present day American politics.

Reforms and remedies for existing political malpractice are critically examined.
Sem. II.
Mr. Dawley Credit: 2*

Social Science 419 Educational Sociology

Prerequisite: Principles of Sociology.
Function of education in society. Agencies that educate. Socialization. Control of social facts, principles, and laws so as to serve human purposes. Maladjustments and remedies. Scientific methods for isolating objectives in social education. Responsibility of the schools for social progress.
Sem. I, II. Credit: 2

Social Science 461-2 Contemporary Civilization

Open to students having at least six hours credit and a B average in the social sciences.
A course to correlate the information acquired in the social sciences and to interpret its meaning for contemporary civilization. Through lectures, discussions, reports, and wide reading, an attempt is made to bring this information to bear on significant economic, political, social, and historical aspects of contemporary civilization in order that each student may further evolve his own social philosophy.
Sem. I, II.
Mr. Shafer Credit: 3-3

*Courses designated with this symbol may be taken for three hours' credit instead of two through the performance of specified outside work. This option is open only to those students who have shown ability in prerequisite courses and who receive the specific permission of the instructors offering the starred courses.

HOME ECONOMICS

ART

Art 106a Introduction to Art

An introductory course on principles of art.
Sem. I, II. Credit: 2
Miss Druley (-4)

Art 106b Introduction to Art

Sem. I, II. Credit: 2
Mlss Druley (-4)

Art 220 Clothing Selection

Study of individual problems of clothing selection.
Sem. I, II. Credit: 2
Miss Jeter 1-(2*)

Art 332 Advanced Design

Prerequisite: Art 106a-b.
A study of the enrichment of objects. Inspiration from nature, historic periods, and significant aspects of modern life. Block printing with experience in its decorative possibilities.
Sem. II. Credit: 2
Miss Druley (-4)

Art 334 House Furnishing

A study of the furnishing needs of the modern house as they relate to convenience, economy, health, and beauty, with emphasis on the significant use of line, mass, color, texture, and pattern. Practice in the selection and arrangement of furnishings.
Sem. I, II. Credit: 2
Miss Carson (-4)

Art 323 Problems in House Furnishing

A course in which curtains, slip covers, screens, and other articles for the house may be planned and made, and furniture reconditioned. Credit:2
Miss Carson (-4)

Art 400 Crafts

Prerequisite: Art 106a-b.
Creative experience in simple, inexpensive home crafts, as, dyeing, lampshade making, and the framing of pictures. The course is planned to meet the needs of those who direct clubs and extra-curricular activities.
Sem. I, II. Credit: 2-3
Miss Druley (4-6)

Art 426 Seminar in Art

Prerequisite: Art 106a-b.
Problems relating to the selection, adaptation, and presentation of art subject matter in homemaking courses for various types of schools. Choice of problems based on needs and interests of individual students.
Sem. I, II.
Miss Druley Credit: 2

Art 430 Art History and Appreciation

Survey of the fine and industrial arts in the most significant historic periods, with emphasis on contemporary work. Visits to museums and galleries.
Sem. I, II.
Miss Druley, Miss Carson Credit: 3

Art 434 Period Furnishings

A study of present day architecture, interiors, and furnishings as influenced by historic styles: Mediterranean, English, French, American Colonial, Georgian, and Empire. Visits to museums and shops.
Sem. I.
Miss Carson Credit: 3

Art 436 Costume Design

Prerequisites: Art 106a-b.
Development of technical ability to create designs for present day costume. Inspiration from nature, historic periods, and modern environment. Costuming for plays and pageants.
Sem. II. Credit: 2
Miss Van Ness (-4)

Art 446a, b Sketch

A study of the essentials of form, light-dark, and color with emphasis on composition. Sketching in pencil, charcoal, and water color.
Sem. I, II. Credit: 1
Miss Druley (-2)

FOOD AND NUTRITION

Home Economics 90s General Nutrition

Elementary course in nutrition; selection of a proper diet for good health based on dietetic principles.
S. S. only.
Miss Cruise Credit: 2

Home Economics 112 Elementary Dietetics

Course emphasizes the maintenance of health through desirable food selection, habits, and health practices. Planned to help freshmen with health and nutrition problems.
Sem. I, II. Credit: 2
Miss Cruise

Home Economics 212 Foundations of Nutrition

Prerequisites: Chemistry 208, Home Economics 230.

A scientific study of the fundamental principles of human nutrition as a basis for the selection of food for the individual and the family group.

Sem. I, II. Credit: 3
Miss Cruise (2-2)

Home Economics 114 Introduction to Foods

A study of the basic food principles in the preparation of food service.

Sem. I, II. Credit: 2
Miss Rogers, Miss Buchanan (1-2)

Home Economics 230 Food Preparation

A study of the basic food principles in the preparation of food products.

Sem. I, II. Credit: 4
Miss Buchanan (1-6)

Home Economics 230x

All students must have, in addition to the prescribed food courses, additional experience in food preparation. Home Economics 230x is planned to meet this requirement and should follow the course in Home Economics 230. The work outlined for this project is to be done during the summer vacation and a practical examination must be completed during the first week of the fall semester.

Home Economics 300 Applied Institution Management

Prerequisite: Home Economics 230.

This course is planned to give the student experience with problems of institution management by operating the college tea room.

Sem. I, II. Credit: 3
Miss Lusby (1-6)

Home Economics 306 Child Nutrition

Prerequisite: Home Economics 212.

A study of child requirements and the preparation of the noon meal for preschool children; methods of judging good or poor

nutrition of children; causes, effects, and prevention of malnutrition; field work.

Sem. I, II. Credit: 2 or 3
Miss Cruise

Child Nutrition for three semester hours of credit must be taken by the students with major interest in foods.

Home Economics 308 Meal Management

Prerequisite: Home Economics 230.

A study of the management factors involved in food problems. Buying of foods; planning, preparing, and serving various types of meals.

Sem. I, II. Credit: 3
Miss Rogers (-6)

Home Economics 310 Nutrition and Dietetics

Prerequisite: Home Economics 212.

A study of normal metabolism and human nutrition; infant feeding; calculation and preparation of diets.

Sem. I. Credit: 3
Miss Cruise (2-2)

Home Economics 452 Institution Food Preparation

Prerequisite: Home Economics 230.

Preparation of food in large quantities, standardization of formulae, calculation of costs. Care and operation of equipment. Menu planning for the institution. Laboratory practice in the college cafeteria.

Sem. I, II. Credit: 3
Miss Lusby (1-4)

Home Economics 328 Institution Administration

Prerequisite: Home Economics 452.

A study of the organization and administration of the food service in various types of institutions such as hospitals, school lunch rooms, and commercial food establishments. Types of organization, methods of administration, personal management, purchasing of food and supplies, records and accounts, equipment selection and arrangement.

Sem. I.
Miss Lusby Credit: 3

Home Economics 400 Food Demonstrations

Prerequisite: Home Economics 230.

Instruction in the technique of food demonstration, planning

and giving demonstrations for different groups; lecture demonstrations by specialists from commerical fields.
Sem. I, II. Credit: 2
Miss Buchanan (-4)

Home Economics 416 Reading in Foods

Survey of research work being done in foods by various educational institutions, commercial firms, special bureaus, etc. Review of late books and magazine articles.
Credit: 1

Home Economics 418 Diet Therapy

Prerequisites: Home Economics 310, Physiology 362.
Abnormal nutrition with dietary treatment of certain diseases; experiments and problems with respiratory apparatus, calorimeter, and laboratory animals.
Sem. II. Credit: 3
Miss Cruise (2-2)

Home Economics 438 Experimental Foods

Prerequisite: Home Economics 230.
This course involves food preparation from the experimental viewpoint developed from a review of the literature in problems of food research. A study is made of food principles and experimental methods which influence standard food products. Class and individual problems.
Sem. I, II. Credit: 3
Miss Rogers (-6)

Home Economics 456 Special Food Problems

Prerequisite: Home Economics 438.
Directed individual work. Involves an extensive study of principles and applications of research methods as applied to food problems. Intensive literature review of problems undertaken.
Sem. I, II. Credit: 2-3
Miss Rogers (-4-6)

CLOTHING AND TEXTILES

Home Economics 102a Clothing Construction

Fundamental processes applied to construction of simple garments.
Sem. I, II. Credit: 2
Miss Van Ness (-4)

Home Economics 102b Textiles

Study of textile materials to help individual in clothing selection and purchasing problems.
Sem. I, II. Credit: 2
Miss Van Ness (-2)

Home Economics 102x

Upon completion of Home Economics 102, students are required to do certain clothing construction processes until a predetermined degree of speed and accuracy in technique has been attained. This standard must be met in a practical test before registration in Home Economics 218.

Home Economics 218 Clothing Construction

Prerequisites: Home Economics 102a-b, 102x.
Construction processes as applied to silk and wool dresses. Emphasis on appropriate design and fabric. Good standards of dress for college students.
Sem. II. Credit: 3
Miss Jeter (1-4)

Home Economics 312 Applied Dress Design

Prerequisite: Home Economics 218.
Practical application of principles of costume design. Emphasis on individuality in costume through appropriate use of line, proportion, color, and texture. Field trip required.
Sem. I, II. Credit: 2-3
Miss Van Ness (4-6)

Home Economics 314 Children's Clothing

A study of the problems involved in the selecting, planning, and making of children's clothing. Emphasis is placed on the relation of design to self-help. Garments are designed and made for children who can be studied in the laboratory.
Sem. I. Credit: 2
Miss Jeter (1-4)

Home Economics 316 Clothing Economics

Prerequisite: Economics 201.
Buying points of clothing; evaluation of buying guides; standardization as related to clothing; individual and family clothing budgets.
Sem. I, II.
Miss Van Ness Credit: 2

Home Economics 336 Clothing Problems

Investigation of problems in clothing with organization and presentation of results. Emphasis on problems which arise in the teaching of clothing; evaluation and preparation of illustrative material; practice in demonstration.

Sem. I, II. Credit: 2

Miss Jeter (1-2)

Home Economics 370 History of Costume

A study of the development of costume. Factors which influence change in fashion; qualities in style that make for lasting beauty; influence of the past on present-day costume.

Sem. I.

Miss Jeter Credit: 2

Home Economics 372 Textile Study

Prerequisites: Home Economics 102a-b.

Physical and chemical analysis of textiles. Use of standard testing appartus.

Sem. II. Credit: 2

Miss Van Ness (-4)

FAMILY LIFE

Home Economics 116 Orientation in Family Life

Study of personal problems of freshmen women; emphasis on personality development.

Sem. I, II.

Miss Michaels Credit: 2

Home Economics 317 Consumer Information

Study of conditions relative to purchasing of goods, with emphasis on consumer information and guidance in the distribution of incomes and the selection of commodities to suit same. Should parallel Social Science 201.

Sem. I, II.

Miss Van Ness Credit: 2

Home Economics 318 Physical Development and Welfare of Young Children

The physical development of the child from early embryonic life to 18 months, and the care of the mother and child throughout this period. Public provision for maternity and infancy.

Opportunities in the field of child welfare for home economics trained women.

Sem. I.

Miss Lawton Credit: 2

Home Economics 403 Home Management

Prerequisite: Junior Standing.

A study of the expenditures of time, energy, and money. Emphasis on the social aspects and the adjustments of family life. Residence in the Home Management House for six weeks with actual experience in the management of the house and the care of a young child.

Sem. I, II.

Miss Lawton Credit: 3

Home Economics 405 Standards of Living

Study of the scales and standards of living of the American and foreign countries. Emphasis on the standard of living of families on moderate incomes.

Sem. I, II.

Miss Lawton Credit: 2

Home Economics 432 Economics of House Furnishing

Study of consumer house furnishing problems based on utilitarian, economic, aesthetic, and social values of household commodities. Quantity and quality budgets at different price levels. Visits to house furnishing markets.

Sem. II.

Miss Carson Credit: 3

Home Economics 352 Housing

Social and economic aspects of housing in relation to family welfare. Rural and urban housing conditions with remedial and restrictive measures for housing evils. Costs of housing, relation of cost to family income, and methods of financing.

Sem. I.

Miss Carson Credit: 2

ADDITIONAL COURSES IN FAMILY LIFE

Social Science 326, Problems of the Family, page 80

Education 424, Social and Mental Growth of the Preschool Child, Page 60.

Education 342, Educational Activities of the Young Child, page 61.

SHOP WORK, DRAWING, AND DESIGN

All courses in this group are nine weeks in length, meeting daily. Due to the variation in the types of content included in these courses the following tabulation is given to indicate the time requirements for credits.

Figures in parentheses indicate hours in preparation:

1 periods per week (2)	18 wks. 1 semester hour
2 periods per week (1)	18 wks. 1 semester hour
3 periods per week (0)	18 wks. 1 semester hour
6 periods per week (0)	9 wks. 1 semester hour
12 periods per week (0)	9 wks. 2 semester hours
10 periods per week (2)	9 wks. 2 semester hours

Industrial Education Orientation

(For Industrial Education Freshmen.)

Admission requirements, program operation, attendance regulations, credits, scholastic measurement. Analysis of characteristics of a good performance in shop or drawing courses, in professional courses, in academic courses, and as a teacher. Personnel problems in physical, social, and mental phases. Curriculum opportunities, professional requirements, trends in requirements in calls for teachers. Analysis of personal performances. Significance of choices available.

Sem. I, II. Credit: 0

Mr. Bowman, Mr. Price, and others Meets 1 hr. per week Sem. I

DRAWING

Industrial Education 121 Elements of Mechanical Drawing I

Analysis of fabricated objects; recognition of elementary shapes; identification of elementary shapes through recognition of principles of construction; measurement of parts; location of parts; principles of geometry applied to construction; representation of fabricated objects through the more commonly used methods of projection drawing; technical sketching; technical specification; glossary; historical; guidance factors.

Sem. I, II. Credit: 2

Mr. Green (2-6)

Industrial Education 234 Mechanical Drawing II

Prerequisite: Industrial Education 121.

Application of the principles of mechanical drawing in the solution of advanced problems of representation, involving various

construction materials and processes. Advanced problems in projections, intersections, revolutions, developments, etc.

Sem. I, II.

Mr. Green (2-8)

Industrial Education 226 General Drawing I

Prerequisites: Industrial Education 118, 121.

Some phases of drawing of general use. Flow sheets, process sheets, operation diagrams. Simple charts, diagrams and graphs.

Sem. I, II. Credit: 2

Mr. Green (2-6)

Industrial Education 228 General Drawing II

Prerequisite: Industrial Education 121, 118.

Working drawings, sketches, installation plans, specifications, detailing and assembling of popular construction such as, remodeling or design of a small building, fences, entrances, garden walls, house trailer and boat building, special shop layouts in Industrial Education, analysis of routing materials.

Sem. I, II; Jr. or Senior year. Credit: 2

Mr. Ray (2-8)

Industrial Education 227 Machine Drawing I

Prerequisites: Industrial Education 121, 118, and one course from the metal work group.

Standard conventions, detailing, technical sketching, materials of construction, material lists, fastening devices, tool processes, shop terms—glossary, technical description, specifications, tabular data, formulae, violations of theory, dimensioning, duplicating, interpreting drawings, diagrammatic, flow sheets—operation diagrams—repair lists—piping diagrams. Use of standard handbooks, graphic computation.

Sem. I, II. Credit: 2

Mr. Green (2-6)

Industrial Education 229 Machine Drawing II

Prerequisites: Industrial Education 227, Math. 211.

Analysis of Motions—uniform, simple harmonics, uniformly accelerated and retarded; cams—plate, cylindrical; spur gears—spur and pinion—pinion and rack—annular; bevel gears; worm and worm wheel; computations; use of odontograph.

Sem. I, II. Credit: 2

Mr. Green (2-6)

Industrial Education 329 Machine Drawing III

Prerequisite: Industrial Education 227.

Mechanical perspective by piercing points of visual rays. Angular perspective, parallel perspective. Use of measuring points, vanishing points of inclined lines. Special methods for determination of perspective of circles. Application of the principles of perspective in the free hand sketching of machine parts. Dimensioning perspective drawings.

Sem. I, II; Jr. or Sr. year. Credit: 2
Mr. Green (1-8)

Industrial Education 433 Machine Drawing IV

Prerequisite: Industrial Education 329.

Considerations of design from standpoint of strength, use, operation, manufacture, tool manipulations, cost; computations; use of standard references; detailing; pictorial assembly; design of jigs; to mechanism of general interest and use.

Sem. I, II; Jr. or Sr. year. Credit: 2
Mr. Green (1-8)

Industrial Education 118 Freehand Drawing I

A study of the basic fundamentals of freehand drawing, lines, circles, ellipses, drawing of geometric solids, freehand perspective; line, form, proportion, shading, study of still life, shop sketching, blackboard practice; study of lettering; pen and ink work; miniature sketches in pencil and ink; design term sketch.

Sem. I, II. Credit: 2
Mr. Ray (2-8)

Industrial Education 224 Freehand Drawing II

Prerequisite: Industrial Education 118.

Pen and ink work; designing of letters; study of alphabets; monograms, trade marks; seals; ornamental hanging signs; lamps in metal and wood; entrances, fences, design of electric fixtures, cabinet designing; garden furniture; industrial arts design, advertising layouts; psychology of advertising; color and design, water color; show card work.

Sem. I, II. Credit: 2
Mr. Ray (2-8)

Industrial Education 231 Architectural Drafting I

Prerequisites: Industrial Education 121, 118.

Fundamental elements of construction and the planning of buildings, lettering, conventions, and symbols; footings and foundations, sill construction, cornices; cellar windows; double-hung windows and casements for frame, stucco, and masonary structures; fireplaces; stairways; preparing preliminary drawings from sketches.

Sem. I, II. Credit: 2
Mr. Ray (2-8)

Industrial Education 233 Architectural Drafting II

Prerequisites: Industrial Education 219, 231.

Preparation of preliminary sketches and drawings; a working set of plans and elevations of a residence, consisting of first and second floor plans; four elevations; basement; details, cross-section perspective; specifications; estimate; heating and ventilation materials of construction; and term report on some phase of building.

Sem. I, II. Credit: 2
Mr. Ray (2-8)

Industrial Education 331 Architectural Drafting III

Prerequisites: Industrial Education 219, 231, 233.

The student chooses his own house design with approval of the instructor; prepares all of the plans, makes a model of the design, and landscapes a proposed lot or prepares an exhibit sheet of the proposed plan rendering in ink or water colors. Lectures on styles of the past and present; modernistic architecture; field trip to study types and furniture; field trip to study construction.

Sem. I, II; Jr. or Sr. Year. Credit: 2
Mr. Ray (2-8)

Industrial Education 431 Architectural Drafting IV

Prerequisites: Industrial Education 219, 233, 331.

Orders of architecture; history of architecture; reports on assignments; elements of law of contracts; heating and sanitation; business houses and public institutions; preparation of model displays and exhibits.

Sem. II, Jr. or Sr. year. Credit: 2
Mr. Ray (2-8)

Industrial Education 471 Architectural Drawing V

Prerequisites: Industrial Education 231, 233, 331, 431.

Fundamentals of Architectural Design. Shades and shadows, coordinate planes, casting shadows, determination of shadow lines. Perspective drawing, terminology, types of perspective,

classic orders, comparison, proportion, elementary principles of architectural rendering.
Sem. I, II. Credit: 2
Mr. Ray (2-8)

ELECTRICAL WORK

Industrial Education 119 Industrial Electricity I

Essentials of electricity including wire splicing, Ohm's Law experiments, cells and batteries, signal circuits, simple light and power circuits, house wiring, direct current lighting and power circuits, direct current generators and motors, practical applied problems.
Sem. I, II. Credit: 2
Mr. Good (3-4)

Industrial Education 343 Industrial Electricity II

Prerequisite: Industrial Education 119.
Magnetic circuits as applied to coils, motors, generators, and transformers. Insulation and insulators. Armature windings and winding projects. Mutual and self-inductance. Conduit wiring projects.
Sem. I, II; Jr. or Sr. year. Credit: 2
Mr. Good (3-4)

Industrial Education 345 Industrial Electricity III

Prerequisites: Industrial Education 119, 343.
Theory and essentials of alternating currents. Shop problems dealing with alternating current measuring instruments, transformers, and various types of alternating current motors and generators and their accessories.
Sem. I, II; Jr. or Sr. year. Credit: 2
Mr. Good (3-4)

GENERAL MECHANICS

Industrial Education 253 General Mechanics I

Prerequisites: Industrial Education 121, 119, 115, 107, 109.
Selections of jobs typical for the content courses in home mechanics; practical mechanics; and simple mechanics. General education is made the basis for the major portion of the shop assignments. Because of its general character, much of the work is adaptable to courses set up for girls in these fields. Students, in addition to their mechanical work, are required to make solutions of problems of management necessary to the successful

operation of the general shop. Bench and mechanical equipment affords excellent opportunity for work in projects in woodwork, plumbing, electricity, woodfinishing, sheet metal repairs, and bench metal work.
Sem. I, II. Credit: 2
Mr. Tustison, Mr. Kranzusch, Mr. Brown (1-9)

Industrial Education 365 General Mechanics II

Prerequisite: Industrial Education 253.
Continuation of General Mechanics I in additional and advanced problems. Problems of arts and crafts nature are added to the already varied program. This additional field lends itself to work of an extracurricular character. New fields of general mechanics nature are explored and original research in developing new problems is stressed. The informational as well as the manipulative content is covered.
Sem. I, II; Jr. or Sr. year Credit: 2
Mr. Tustison, Mr. Kranzusch, Mr. Brown (10)

Industrial Education 369 Industrial Mechanics I

Prerequisite: Junior standing, or equivalent, in technical sequence.
Industrial Mechanics is a course designed to train teachers to develop the ability of high school students to recognize and interpret mechanical and social change in industry. A study is made of the power, mechanics, and materials involved in the various kinds of industries and in the machine and mechanical devices used by the average citizen. Information is collected and discussed on the kinds of work individuals do in industry, the educational qualifications and preparation they must have for entrance into industry as a worker, and the effect of government regulations on industry and on the consumer.
Sem. II, Jr. or Sr. year. Credit: 2
Mr. Good

METAL WORK

Industrial Education 245 Auto Mechanics I

Prerequisites: Industrial Education 113, 119.
Seven weeks to the study, repair, and adjustments of the various units of the chassis not including the engine, on live cars brought into the shop. Two weeks to the fundamental principles

of operation of the automobile engine, and adjustments of its various parts.
Sem. I, II. Credit: 2
Mr. Good, Mr. Kranzusch (2-6)

Industrial Education 247 Auto Mechanics II

Prerequisite: Industrial Education 245.
Modern shop practices in overhauling and repairing auto engines and their accessories. Reboring and honing cylinders; fitting new pistons, rings and piston pins; reseating, grinding, and testing valves; repairing and adjusting carburetors.
Sem. I, II. Credit: 2
Mr. Good, Mr Kranzusch (2-6)

Industrial Education 341 Auto Mechanics III

Prerequisites: Industrial Education 245, 247
Electrical equipment of the automobile Construction, principles of operation, adjustments and repair of the various types of circuits, operating units, and storage batteries. Practice in diagnosing, locating, and repairing electrical troubles on live cars.
Sem. I, II; Jr. or Sr. year. Credit: 2
Mr. Good, Mr Kranzusch (2-6)

Industrial Education 451 Auto Mechanics IV

Prerequisites: Industrial Education 245, 247, and 341.
For teachers and prospective teachers of auto mechanics, giving experience in the preparation of instructional units for junior and senior high schools and for vocational schools. Selection and organization of teaching material, shop lay-out, student routing and shop mangement, equipment selection, tool room planning and operation.
Sem. II, Jr. or Sr. year. Credit: 2
Mr. Good, Mr Kranzusch (4-2)

Industrial Education 243 Foundry I

Molding, involving cutting and tempering molding sand preparatory to ramming bench and floor molds. Core making involving making and baking of cores for molds. Cupola practice, including operation of the cupola and the handling and pouring of molten metal. Selecting, mixing, and melting pig iron and machinery scraps to secure machinable qualities in the castings. Two or three heats of cast iron. Melting and pouring of brass and aluminum in a crucible.
Sem. I, II. Credit: 2
Mr. Milnes (2-8)

Industrial Education 337 Foundry II

Prerequisite: Industrial Education 243.
Advanced molding projects, match plates for production work; Metallurgy of the foundry. Several heats of iron, brass, and aluminum.
Sem. I, II; Jr. or Sr. year. Credit: 2
Mr. Milnes (2-8)

Industrial Education 339 Foundry III

Prerequisite: Industrial Education 337.
Advanced molding and core making problems, and cupola practice. Survey of the foundry trade. Field trips, preparation of instructional material.
Sem. I, II; Jr. or Sr. year. Credit: 2
Mr. Milnes (2-8)

Industrial Education 113 Machine Shop I

Construction and operation of the lathe, milling machine, drilling machine, shaper, and grinding machine. Shapes of the cutting tools, grinding, setting, and operating. Calculations to obtain the correct feeds and speed for cutting various metals. Related technical information. Projects involve basic processes on each machine.
Sem. I, II. Credit: 2
Mr. Milnes (2-8)

Industrial Education 235 Machine Shop II

Prerequisite: Industrial Education 113.
Spiral gear cutting and rack cutting involving the use of the milling machine. Internal and external square thread cutting on the lathe. Cylindrical grinding in the universal grinder. Stress upon related information pertaining to machine shop work.
Sem. I, II. Credit: 2
Mr. Milnes (2-8)

Industrial Education 237 Machine Shop III

Prerequisite: Industrial Education 235.
Worm gearing, tool and cutter grinding, and problems in tool making. Planning, drilling, and tapping cast iron machine parts. A survey of the trade is made with view to organizing material for teaching. Material uses and cost studies.
Sem. I, II. Credit: 2
Mr. Milnes (2-8)

Industrial Education 435 Machine Shop IV

Prerequisite: Industrial Education 237.

Bevel-gear cutting, punch and die making, internal grinding, problems in tool making. Studies of selection of appropriate materials. Organization of project material and instructional units.

Sem. I, II; Jr. or Sr. year. Credit: 2

Mr. Milnes (2-8)

Industrial Education 115 Sheet Metal I

Fundamental machine and hand tool operations; care, use, and adjustment of sheet metal equipment; the development of simple patterns involving parallel and radial lines; direct layout and short methods; study of markets, manufacture, buying, etc. of equipment and supplies.

Sem. I, II. Credit: 2

Mr. Keith (2-8)

Industrial Education 239 Sheet Metal II

Prerequisite: Industrial Education 115.

Drafting irregular patterns by means of triangulation; triangulation using the top view in the layout, triangulation using both top and side view in the layout, triangulation using the side view only in the layout, shop practice in the make-up of irregular fittings from various fields of sheet metal work.

Sem. I, II. Credit: 2

Mr. Keith (2-8)

Industrial Education 241 Sheet Metal III

Prerequisites: Industrial Education 115, 239.

Shop problems in blower and exhaust piping, architectural work, heating and ventilating, drafted and made up. Mensuration applied to sheet metal containers. Review of triangulation; advanced forms of parallel line and radial development.

Sem. I, II; Jr. and Sr. year Credit: 2

Mr. Keith (2-8)

Industrial Education 333 Sheet Metal IV

Prerequisite: Industrial Education 115.

The working of copper, brass, aluminum, pewter, monel metal, etc.; their uses and application in sheet metal work; project involving soft and hard soldering, spinning, raising, chasing,

seaming, piercing, etching, coloring, etc.; study of related and technical information, markets, and supplies.

Sem. I, II; Jr. and Sr. year Credit: 2

Mr. Keith (2-8)

Industrial Education 335 General Metal I

Prerequisites: Industrial Education 115, 113.

General shop of the trade group type. Organization, courses of study, layouts, equipment, operation, uses of instructional material, supplies. Shop work in selected projects representing bench metal, forging, heat treating, machine shop, oxy-acetylene welding.

Sem. I, II. Credit: 2

Mr. Keith (2-8)

Industrial Education 455 Oxy-acetylene and Electric Welding

Prerequisite: Industrial Education 335.

Setting up, operation, maintenance, and repair of generators, tanks, gauges, manifolds, lines and torches. Setting up operation, and maintenance of arc welding equipment. Emphasis on gas and electric welding and cutting of all common metals. Instructional organization of gas and electric welding.

Sem. I. II; Jr. or Sr. year. Credit: 2

Mr. Keith (2-8)

Industrial Education 355 General Metal II

Prerequisite: Industrial Education 335 and 455.

Continuation of General Metal I. Advanced work in ornamental and tool forging oxy-acetylene welding, power hammer work, bench metal, electro-plating, heating treating, and the use of ceramic tile in combination with metal. A study is made of new machines, tools, and metals, their manufacturing costs, etc.

Sem. I, II; Jr. and Sr. year Credit: 2

Mr. Keith (2-8)

PRINTING

Industrial Education 117 Printing I Elementary Composition

Elements of composition, stonework, and platen press work. Graded projects in straight composition involving basic operations of job printing, proof reading. Supplementary lectures and demonstrations given in definite teaching units.

Sem. I, II. Credit: 2

Mr. Baker and others (2-8)

Industrial Education 255 Printing II Advanced Composition

Prerequisite: Industrial Education 117.

Advanced composition. Problems in display compositon, stonework, and platen press work. An introduction to commerical problems and jobs, through use of typical projects. Allows gain in skill as craftsman. Supplementary lecture periods devoted to typographical design and its application.

Sem. I, II. Credit: 2

Mr. Baker

Industrial Education 257 Printing III Machine Composition

Prerequisites: Industrial Education 117, 255.

Study of intertype and linotype machines. Includes study of the complete mechanism, care, and operation of typesetting machines. Time divided between mechanism and practice operating. Sufficient time is spent on study of mechanism of the machine to give a complete knowledge of principles and care.

Sem. I, Jr. or Sr. year. Credit: 2

Mr. Baker (3-7)

Industrial Education 351 Printing IV Printshop Mechanics

Prerequisites: Industrial Education 117, 255, 257, 459.

Course designed to cover study of adjustments and care of all machines found in the school and job shop, including platen and cylinder presses, automatic feeders, stereotype equipment, linotype, intertype, monotype, paper cutters, stitchers, and folders. Operation tests on each. Study and reference will include special work and storage equipment.

Sem. II, Jr. or Sr. year. Credit: 2

Mr. Baker (5-5)

Industrial Education 259 Printing V School Publications

Prerequisites: Industrial Education 117, 255, 257, English 439.

Prepares teachers of printing to handle school periodicals as a part of their work. Study of school newspapers, magazines, and annuals from the viewpoint of organization and operation. Elements of journalism and their application from the viewpoint of the printing instructors. The Stoutonia, the weekly school newspaper, and morgue used as a laboratory.

Sem. II, Jr. or Sr. year. Credit: 2

Mr. Baker (6-4)

Industrial Education 361 Printing VI Printing Design

Prerequisites: Industrial Education 117, 255.

Application of elementary art and design to practical printing. Study of type design, commerical layouts, colors, papers, cover designs, folders, and booklets. Lectures, shop work and drawings. Application of block carving.

Sem. II, Jr. or Sr. year. Credit: 2

Mr. Baker (4-6)

Industrial Education 449 Printing VII Printing Economics

Prerequisites: Industrial 117, 255.

Acquaint the teacher of printing with economic problems of both commerical and school print shops. Shop organization and management, purchasing of equipment and supplies, shop layouts, and cost estimating. Lectures supplemented by references and practical problems. Part time devoted to organization of material for instructional purposes, and development of printing tests.

Sem. II, Jr. or Sr. year. Credit: 2

Mr. Baker (6-4)

Industrial Education 459 Printing VIII Presswork

Prerequisites: Industrial Education 117, 225, 257.

Practical problems and operation of platen and cylinder presses, and automatic feeders for platen presses, imposition of large forms. Research problems in presswork. Field study of modern presses, multiple-color, rotary, rotogravure, offset, and automatic feeding machinery. Problems in bindery operations involving bindery machinery. Study of paper and inks and their importance in the press room. Field trips.

Sem. I, Jr. or Sr. year. Credit: 2

Mr. Baker

Industrial Education 359 Cooperative Printing (Off-Campus and Campus)

Prerequisites: Industrial Education 117, 255.

Full time work in a commercial shop under the supervision of a coordinator. Campus cooperative printing consists of production work in the school shop, under shop conditions. Maximum time required equivalent to two regular shop courses.

On request for qualified students.

All year. Credit: 2

Mr. Baker and others (24)

WOODWORK

Industrial Education 107 Elements of Hand Woodwork

Basic processes in hand woodwork. Study and performance in

sharpening and care of common hand tools. Study and performance in getting out stock, laying out, and making common joints and construction through the use of exercises and a project involving fundamental or basic processes and points.

Credit: 2
Sem. I, II. (2-8)
Mr. Wigen, Mr. Paul Nelson

Industrial Education 131 Elements of Machine Woodwork

Prerequisite: Industrial Education 107.

Basic course with emphasis on operation of stationary and portable machinery, combinations of operations typical in modern processes in industry. Applied in machining stock for one or more projects to be at least partially assembled. Use of working drawings, stock cutting bills, patterns, rods, jigs, and templates. Kinds, characteristics, and classifications of wood and lumber.

Credit: 2
Sem. I, II. (3-7)
Mr. Hansen

Industrial Education 215 Case and Furniture Making (Cabinet Work I)

Prerequisites: Industrial Education 107, 131.

Making projects suitable for senior high school classes. Use of working drawings or models, or both, and stock cutting bills. A wide range of stationary and portable machinery will be used as extensively as possible. Order of procedure, a special system of face marking and laying out, smoothing, and assembling are stressed. Construction characteristics, kinds and uses of joints, and detailed dimensions for parts and location of joints will be studied. Tests will be taken on a laboratory basis for moisture content, shrinkage, expansion, and case hardening of wood; temperature and relative humidity of atmosphere, and consequent effect on wood will be taken. A graph showing daily changes in atmosphere will be made by the class.

Credit: 2
Sem. I, II. (3-7)
Mr. Hansen

Industrial Education 311 Design in Furniture and Casework I (Formerly Cabinet Work II)

Prerequisites: Industrial Education 107, 131.

One major division deals with a study of laws, theories and principles of art in esthetic and structural design based upon utility. Ratios, proportion, space division, contour and surface enrichment, economic conservation of lumber, construction

characteristics and joints are also studied. The other major division is based on a shop problem which includes: Selection and designing major and novelty projects for elementary, junior or senior high school; or an occasional advanced project. Making full-size working drawings, stock cutting bills, patterns, rods, jigs, forms, knives and templates. A field trip is required when possible.

Sem. I, II, SS, Soph. or Jr. year. Credit: 2
Mr. Hansen (3-7)

Industrial Education 312 Cabinet and Furniture Work II

Prerequisites: Industrial Education 107, 131, 215.

Drawer and door construction and fitting. Glue and gluing problems. Veneer and veneering. Cabinet hardware. Occupational opportunities. Teaching problems. Buying and care of supplies and equipment. Shop layouts and tool systems. Extension and expansion in Cabinet Work I problems. This course is primarily provided for those who wish to make more than twelve credits in shop woodwork and will be scheduled with Cabinet Work I on a general shop basis by special approval of instructor and director.

Sem. I, II. Credit: 2
Mr. Hansen (2-8)

Industrial Education 411 Advanced Cabinet and Furniture Making (Cabinet Work III)

Prerequisites: Industrial Education 107, 131, 215, 311.

Advanced cabinet and furniture work somewhat on a thesis basis. An extension, application, and try-out of the work done in Ind. Ed. 311, each student building the project he designed and made working drawings for. A factory field trip is recommended before taking this course. Special curricular and extracurricular freedom in the use of the mill room, cabinet shop, and equipment are offered in and after this course.

Sem. I, II; Jr. or Sr. year. Credit: 2
Mr. Hansen (10)

Industrial Education 219 Carpentry I

Prerequisites: Industrial Education 107, 131.

Surveying and staking out for buildings; concrete forms constructed for a section comprising footings, wall, flue, beam, and stairway; stripping of concrete forms, floor framing, wall framing, and roof framing in actual house constuction; the steel square as used in roof framing; sheathing, shingling, and insu-

lating; correlation between workers in carpentry and between the building trades. Reference assignments and "round table" discussions.

Sem. I, II. Credit: 2
Mr. Paul C. Nelson (2-8)

Industrial Education 319 Carpentry II

Prerequisites: Industrial Education 107, 131, 219.

Review of equal pitch roof framing; study and construction of unequal pitch roof framing; cornice construction, porch framing and finishing; exterior trimming; scaffold construction; study of building materials; quantity surveying and ordering materials; projects for teaching carpentry; workers in the carpentry trades; reference assignments and "round table" discussions.

Sem. I, II; Jr. or Sr. year. Credit: 2
Mr. Paul C. Nelson (3-7)

Industrial Education 421 Carpentry III

Prerequisites: Industrial Education 107, 131, 219, 319.

Interior finishing; elements of stair building; polygonal and curved roof and ceiling construction; structural design in framing; structure and aesthetic design in finishing; organization teaching material and shop equipment for courses in carpentry; supervision of a carpentry teaching job; carpentry as a life work; reference assignments and reports.

Sem. I, II; Jr. or Sr. year. Credit: 2
Mr. Paul C. Nelson (10)

Industrial Education 116 General Woodwork I

Prerequisite: Industrial Education 107.

A general shop course which provides (1) information and practice in several basic kinds of woodwork and (2) observation and study of a revolving plan for general shop instruction.

The nine week term is divided into three three-week units and the class into three groups. Each group changes to a new unit of instruction at the end of three weeks.

Typical shop projects used in the three-week units are representative of upholstery, carpentry, school shop equipment and Keene's cement work (forms, molds, casting, finishing).

Sem. I, II. Credit: 2
Mr. Paul C. Nelson (2-8)

Industrial Education 263a General Woodwork II (Millwork)

Prerequisites: Industrial Education 107, 131.

Extension of Ind. Ed. 131 with major attention on problems in

industrial mill work. Projects will vary according to practical demands which furnish suitable problems for correlation with carpentry, architectural details, and cabinet work. Making sash, doors, built-in cabinet work, window and door frames, moldings or milling stock for other classes will be done on a production basis.

Sem. I, II. Credit: 2
Mr. Hansen (3-7)

Industrial Education 263b General Woodwork II (Mill-Wrighting)

Prerequisites: Industrial Education 107, 131.

Care and maintenance of woodworking machinery, machine saw and knife fitting, band saw brazing, aligning and adjusting parts of machines, babbiting and adjusting bearings, belting and power transmission problems, installing new equipment, laying out and making molding knives and general repair work to keep equipment in condition. Cutting angles, backing clearance, grinding bevels cutting speeds, rates of feed and shop layouts will be studied.

Sem. I, II. Credit: 2
Mr. Hansen (2-8)

Industrial Education 364 General Woodwork III

Prerequisites: Industrial Education 107, 131, 215.

A variety of form and surface enrichment to enlarge experiences which have been or will be acquired in other courses.

Form enrichment: Making tapered and cabriole legs, curved rails, shaping, sticking, coping, molding, turning. Making curved parts by saw kerfing, by building up cores to be veneered, by laminating, and steaming and bending.

Surface enrichment: Veneering, inlaying, overlaying, carving, fluting, reeding, routing, punching, caning and piercing, or fret sawing.

These may be applied on parts for projects to be completed later, or on exercises which may be used as demonstration samples.

Sem. I, II; Jr. or Sr. year. Credit: 2
Mr. Hansen or Mr. P. C. Nelson (2-8)

Industrial Education 111 Woodturning I

Prerequisites: 107, 131, 118.

Spindle turning-concentric and offset. Face plate and chuck turning. Mandrel turning. Segmental and other built-up work. Bor-

ing and internal turning. Split turning, cutting spirals. Fluting. Inlaying. Applying finishes to turned articles. Shaping and sharpening woodturning tools. Standard and special turning tools. Modern production methods and machines for woodturning.

Sem. I, II. Credit: 2

Mr. Paul C. Nelson (2-8)

Industrial Education 240 Boat Building I

Prerequisites: 107, 131, 121.

Study of full-size plans, profiles and body drawings of boats. Layout, shaping and assembling keep, stem, transom and frames. Shaping, bending and attaching planking. Attaching gunwales, battens and seats. Constructing floor and decks. Waterproofing and painting.

A small runabout, or similar type of boat, is built as a class project.

Sem. II. Credit: 2

Mr. Paul C. Nelson (2-8)

Industrial Education 340 Boat Building II

Prerequisites: 107, 131, 121, 240.

Drawing boats to scale to develop plan, profile, diagonal, lift, buttock and body lines. Making scale models. Laying down lines. Fairing, cutting station patterns. Making table of offsets. Elements of proportion and shape and their relationship of seaworthiness, stability, safety and speed. Kinds, properties, sources and costs of boat materials.

Sem. II. Credit: 2

Mr. Paul C. Nelson (2-8)

Industrial Education 447 Cooperative Work on Campus

Prerequisites: Industrial Education 107, 131, 215, 311.

This work is on a production basis. Building equipment, teaching demonstration models, etc., in the mill room and cabinet shop. Only such jobs as are suitable and provide definite training experience will be taken on.

Sem. I, II. Credit: 2

Mr. Hansen (2-4)

Industrial Education 448 Cooperative Work in Industry

Prerequisites: Industrial Education 107, 131, 215, 311.

Through affiliations with industry, opportunities are available for practical experience in woodturning plants in nearby cities. Applications on Smith-Hughes requirements are frequently made. A conference with instructor in charge is necessary

before assignment.

Sem. I, II. Credit: 2

Hansen, Nelson, Wigen Curran and others

Industrial Education 353 Furniture Upholstery I

Upholstering tools and equipment; materials used; cost of materials and equipment; chair frame construction for upholstery; pad seat and pad back upholstery; the spring seat and spring back; overstuffed furniture; curved back upholstering; study of leathers, tapestries, velours, mohairs; planning and cutting the covering materials; repairing upholstered furntiure.

S. S. only Jr. or Sr. year. Credit: 2

Mr. Curran (1-9)

Industrial Education 373 Furniture Upholstery II

Prerequisite: Industrial Education 353.

Course includes larger and more difficult jobs in overstuffed furniture or antique furniture. More emphasis is placed on planning ordering and cutting covering material. Student may choose type of job to build.

S. S. only Jr. or Sr. year. Credit: 2

Mr. Curran (10)

Industrial Education 366 (Formerly 133) Home Craft and Repair Work

Simple furniture repairing and reupholstering; footstools of various styles made and upholstered; designing, making and finishing toys; games and puzzles for children of different ages; bird houses and feeders; doll furniture; nursery furniture; garden furniture; tool boxes; window boxes; window shelves; tie racks; watch holders; book racks; shoe racks; weather vanes; wind mills; wall cabinets shelves and brackets. Small power machines may be used. Instruction planned with groups and with individuals. Each student may select types of work suited to his needs. This course offers suggestions to teachers, to leaders of craft clubs, and amateur craftsmen. Open to men and women.

S. S. only Credit: 2

Mr. Curran (2-8)

Industrial Education 221a Painting and Decorating I

Study and practice in application and uses of basic finishes for composition, material, wood, and metal. Methods of finishing old work. Practical experience with new types of finishing materials: plastic paints, bakelite, lacquers, textone, etc. Mod-

ern practice in the use of spraying equipment.
Sem. I, II. Credit: 2
Mr. Wigen (2-8)

Industrial Education 221b Painting and Decorating II

Prerequisite: Industrial 221a.

Study and practice in color theory, color mixing and applications in various mediums. Instruction sheets and pupil selection of special type finishes and methods; two tone antique methods, stenciling, stripping, glazing, blending, hazing, etc. Large panels of special wall finishes, strippling, blending, texturing with plastic materials. Production work with the use of the spraying equipment. Experience with basic metal finishing methods.
Sem. I, II; Jr. or Sr. year. Credit: 2
Mr. Wigen (2-8)

Industrial Education 225 Patternmaking I

Prerequisites: Industrial Education 107, 227.

Wood patterns of machine parts for casting in iron, brass, and aluminum. Study of types of work performed by patternmakers. Patternmaking allowances; shellacking a pattern to convey information to a molder. Patterns involving solid, split, and segmental construction; core boxes for whole and half cores; right and left hand, interchangeable baked sand cores. Patternmaking materials. Visit to a foundry.
Sem. I, II. Credit: 2
Mr. Milnes (2-8)

Industrial Education 325 Patternmaking II

Prerequisites: Industrial Education 225, 243.

Patterns for sheave wheel; bevel gear blank; mounted and gated patterns for production work; irregular shaped patterns and match plates; two inch soil pipe fittings involving bench lathe work and built up core box construction. Segmental pulley construction involving spokes, webs, and bosses. Survey of patternmaking and organization of instructional material.
Sem. I, II; Jr. or Sr. year. Credit: 2
Mr. Milnes (2-8)

Industrial Education 327 Patternmaking III

Prerequisite: Industrial Education 325.

Planning and building patterns for a small machine such as drill press, bench grinder, electric motor. Place of patternmaking in industry. Study of construction of patternmaking for sweep work

in the foundry. Pattern shop equipment plans for school shop.
Sem. I, II; Jr. or Sr. year. Credit: 2
Mr. Milnes

BUILDING CONSTRUCTION

Industrial Education 249 Masonry I

Elements of bricklaying, including spreading in the various bonds, corners, walls chimneys; piers; building of pilasters, construction of arches, walling in window frames; building of fireplaces. Fundamentals of concrete work such as sidewalks, curbs, and gutters, foundations, walls, steps, cistern, septic tanks, retaining walls, stuccoing terrazza and ornamental garden furniture birdbaths, benches, flower boxes, tables, etc. Preparation of modern instructional material; analysis of the trade for instructional purposes, including related and occupational information. Demonstrations and class work carried on in actual trade practice conditions. Optional units in concrete work are available when necessary.
Sem. I, II. Credit: 2
Mr. Ray

Industrial Education 251 Masonry II

Prerequisite: Industrial Education 249.

A continuation of Masonry I in advanced problems; speed work; motion study; analysis of the more complicated phases of masonry; related work and assignments for class reports. Possible instructional distributions in high schools and vocational including shop layouts. Costs of equipment, trade tests, scaffolding, safety and hygiene; estimating. Optional units in concrete work available when necessary.
Sem. I, II.
Mr. Ray Credit: 2

Industrial Education 354 General Building Construction I

Prerequisites: Industrial Education 219, 249.

Lectures, field study reports, and analytical studies in general building construction. Materials, building trends, codes, modern definitions of good practice and economics of building construction. Preparation of instructional and guidance material. Identification of content for consumer, home owner, and builder values.
Sem. II; Jr. or Sr. year. Credit: 2
Mr. Ray

Student Roster

1937-38

* * * * *

Degrees Conferred 1937

Adams, Harvey J.	Florence, S. C.
Anderson, Emily (Hanke)	Adams, Minn.
Anderson, Kermit	Wadena, Minn.
Arntson, Clarence	Atlanta, Ga.
Barich, Garrott	Madison, Wis.
Chard, Lawrence A.	Bisbee, Ariz.
Chenoweth, Carol	Freeborn, Minn.
Chinnock, Dwight	Red Wing, Minn.
Chitwood, Clara B.	Milwaukee, Wis.
Christianson, Peter	Eau Claire, Wis.
Cigard, J. Herbert	Lansing, Mich.
Clark, Eugenia B.	Morris, Minn.
Cochrun, Halford H.	Los Angeles, Cal.
Dee, Mary	Wausau, Wis.
DeRoo, LeRoy	Milwaukee, Wis.
Ellison, Eleanor	Philadelphia, Pa.
Emerson, Toby G.	Omro, Wis.
Engelbracht, Nellie	Bismarck, N. D.
Erckmann, Norman	Atlanta, Ga.
Flanagan, Eleanor	Stanley, Wis.
Fondell, Hilma	Watertown, Wis.
Getzin, Jennie	Cudahy, Wis.
Good, Helen	Middleton, Wis.
Griffin, Dora H.	Sheboygan, Wis.
Gross, Iva Mae	Charleston, S. C.
Hancher, John	Ellwood City, Pa.
Herwig, Erma	Williams Bay, Wis.
Jewett, Verne	Neillsville, Wis.
Johnson, Cyril	Webster Springs, W. Va.
Johnson, Stanley	Hammond, Ind.
Joos, Mabel	Stanley, Wis.
Jumer, William R.	Detroit, Mich.
Keown, Hugh	Augusta, Ga.
King, Clarke H.	Pueblo, Colo.
La Page, Gretchen	Waukesha, Wis.
Laurich, Olga	Cherry, Minn.
Lloyd, Dorothy	Spooner, Wis.
Lulloff, Rosemary Port	Washington, Wis.
Lutze, Hildegarde	Ewen, Mich.
Martin, Jane	Ladysmith, Wis.
Martin, Mildred	Milltown, Wis.
McCullock, Malcolm	Barracksville, W. Va.
McLeod, James M.	Wilmington, N. C.
Melby, Andrew	Baltimore, Md.
Mezzano, James	Lansing, Mich.
Miller, Marion	Orr, Minn.
Miller, Ruth Rick	Mishicot, Wis.
Milnes, Jack	Marshfield, Wis.
Murphy, Emmett R.	Iron Mountain, Mich.
Murray, Gertrude Ann	Worthington, Minn.
Myrick, Vincent J.	Montgomery Hills, Md.
Nelson, Anita	Eau Claire, Wis.
Nelson, Eunice	La Farge, Wis.
Nelson, Vernon	Hibbing, Minn.
Nelson, Viggo	Battle Creek, Mich.
Gilker, Lorraine Neverdahl	Green Bay, Wis.
Nowack, Eugenia	Roberts, Wis.
Oja, Vaino	Virginia, Minn.
Olson, Harriet	Elmwood, Wis.
Olson, Manvell	Atlanta, Ga.
Owen, Louise	Augusta, Wis.
Pagnucco, Charles	Milwaukee, Wis.
Peck, Sara	Shell Lake, Wis.
Pelto, C. Maurice	Battle Creek, Mich.
Person, Marcus	Monroe, La.
Petersanti, Nello	Chicago Heights, Ill.
Riccelli, Gene	Flint, Mich.
Rice, Kathryn	Niagara, Wis.
Ringsmith, Paul	Atlanta, Ga.
Rosenthal, Herbert	Atlanta, Ga.
Sand, William	Menomonie, Wis.
Sawyer, Barbara	Becker, Minn.
Schulz, Harold A.	Milwaukee, Wis.
Shuster Sylvia L.	Wonnewoc, Wis.
Sister M. Marquerite	Milwaukee, Wis.
Sister M. Ruperta	Milwaukee, Wis.
Sjolander, Margaret	Whitehall, Wis.
Slette, Alf L.	Joliet, Ill.
Soukup, Belle	Council Bluffs, Ia.
Steiner, Elner	Randolph, Wis.
Strong, Ethel	Houston, Texas
Sturmer, Carolyn	Cassville, Wis.
Styer, Lois	Ithaca, Wis.
Tapper, Benjamin	El Paso, Texas
Volp, Glenn	Panama City, Fla.
Waffle, Harvey	Waukesha, Wis.
Winger, William	Port Huron, Mich.
Zastrow, Loretta	Independence, Wis.
Zeilinger, Charles	Flint, Mich.
Zierath, Marian	Flint, Mich.

Senior Class

Allen, Clarence T.	Menomonie, Wis.
Ausman, Lorraine E.	Elk Mound, Wis.
Averill, Marie L.	Lugerville, Wis.
Bakken, Ward E.	Menomonie, Wis.
Bartlett, Velma	Chippewa Falls, Wis.
Barbo, Agdur A.	Menomonie, Wis.
Baudek, Anthony	Aurora, Minn.
Becker, Florence A.	LeCenter, Minn.

Blank Keil E.	Oconto, Wis.
Blank Neil E.	Oconto, Wis.
Boehlke, Florence K.	Eau Claire, Wis.
Bonacci, Rinaldo	Aurora, Minn.
Brophy, John M.	Milwaukee, Wis.
Brown, Lowell E.	Menomonie, Wis.
Bryant, Virginia N.	Menomonie, Wis.
Christiansen, Ardys E.	Amery, Wis.
Christophersen, Irene	Menomonie, Wis.
Conrad, Warren D.	Milwaukee, Wis.
Craemer, Claude P.	Eau Claire, Wis.
Dee, Doris L.	Chippewa Falls, Wis.
Dolejs, Joseph M.	Antigo, Wis.
Duesing, Georgia	Menomonie, Wis.
Ebert, Edna	Ashland, Wis.
Erickson, Dorothy S.	Osseo, Wis.
Flick, Doris N.	La Crosse, Wis.
Fortin, John E.	Knapp, Wis.
Fox, Stanley L.	Waseca, Minn.
Frey, Ernest A.	Seattle, Wash.
Friedl, Agnes	Antigo, Wis.
Good, Ruth C.	Menomonie, Wis.
Goodwin, Ralph E.	Burlington, Wis.
Graslie, Lorene L.	Spring Valley, Wis.
Gronseth, Oscar A.	Stoughton, Wis.
Hansen, Jeannette	Menomonie, Wis.
Harrington, Edwin F.	Superior, Wis.
Hartmann, Henry O.	Ft. Atkinson, Wis.
Hed, Agnes J.	Crandon, Wis.
Hellum, Jack P.	Menomonie, Wis.
Huebner, Roland J.	Milwaukee, Wis.
Hulter, Henry W.	Superior, Wis.
Iverson, Herbert	Menomonie, Wis.
Jeatran, Thea	Menomonie, Wis.
Jensen, Weston W.	Ashland, Wis.
Johnson, Fanchon A.	Eau Claire, Wis.
Johnson, Raymond J.	Menomonie, Wis.
Johnson, Robert O.	Menomonie, Wis.
Johnson, William F.	Menasha, Wis.
Keith, Betty Jean	Menomonie, Wis.
Klatt, Mary Ellen	Elmwood, Wis.
Koss, Magdaline	Casco, Wis.
Kurz, Jerry John	Durand, Wis.
Laatsch, Earl E.	Milwaukee, Wis.
Lanckton, John Kyle	Menomonie, Wis.
Lartz, George F.	Suring, Wis.
La Tondresse, Walter R.	Racine, Wis.
Leyhe, William S.	Plymouth, Wis.
Lichtenberg, Edna	Princeton, Wis.
Lulloff, Marjorie	Greenleaf, Wis.
MacMiller, Franklin L.	Wheeler, Wis.
Mather, Arthur B.	Nevada, Iowa
Milbrot, Velda A.	Oakfield, Wis.
Miller, Norman M.	Menomonie, Wis.
Milliren, Harriet	Menomonie, Wis.
Mueller, Albert M.	New Glarus, Wis.
Myron, Jeanne E.	Baldwin, Wis.
Nelson, Eleanore M.	Wisconsin Rapids, Wis.
Neubauer, Eugene E.	Menomonie, Wis.
Neubauer, Gerhardt F.	Menomonie, Wis.
Newman, Lorenzo M.	Chippewa Falls, Wis.
Norman, Mary Margaret	Manitowoc, Wis.
O'Hara, Mary Patricia	Lanesboro, Minn.
Olstad, Harry B.	Menomonie, Wis.
Ostrom, Everet	Clear Lake, Wis.
Paulson, Harold L.	Stoughton, Wis.
Porter, Bernard R.	Madison, Wis.
Potter, Roselyn	Milwaukee, Wis.
Price, John A.	Milwaukee, Wis.
Price, Margery	Menomonie, Wis.
Quilling, Jane L.	Menomonie, Wis.
Quilling, Sara B.	Menomonie, Wis.
Rausch, Alma G.	Minneapolis, Minn.
Richert, Robert Vaun	Menomonie, Wis.
Riggert, Margaret L.	Ft. Atkinson, Wis.
Ruud, Melford	Madison, Wis.
Sawyer, Marvin R.	Neenah, Wis.
Schnitger, Harriet W.	Watertown, Wis.
Segerstrom, Eleanor Overby	Rice Lake, Wis.
Selves, Elliott A.	Neillsville, Wis.
Shearer, Mabel P.	Menomonie, Wis.
Skinner, Sidney J.	Eveleth, Minn.
Slater, Edith L.	Ft. Atkinson, Wis.
Snively, Mary Francis	Menomonie, Wis.
Sogge, George L.	Two Rivers, Wis.
Springer, Charles Alex	Menomonie, Wis.
Steiner, Marjorie C.	Appleton, Wis.
Sterner, Rebecca A.	Menomonie, Wis.
Styer, Leo E.	Menomonie, Wis.
Trettin, Elizabeth C.	Appleton, Wis.
Vincent, Vernon R.	Eau Claire, Wis.
Voight, Edna M.	Menomonie, Wis.
Volp, Earl A.	Menomonie, Wis.
Von Gonten, Gorden B.	Racine, Wis.
Wagner, Marion E.	Menomonie, Wis.
Webb, Betty M.	Viola, Wis.
Wieland, Donald H.	Arcadia, Wis.
Wivell, William R.	Taconite, Minn.
Wood, Leona	Arcadia, Wis.

Junior Class

Allen, Edna Mae	Green Bay, Wis.
Amundson, Margaret S.	New Auburn, Wis.
Anderson, Emma M.	Menomonie, Wis.
Bennett, Louise	Chippewa Falls, Wis.
Birkholz, Margaret	Manitowoc, Wis.
Blair, Frederick O.	Downsville, Wis.
Blank Marcia L.	Milan, Wis.
Bostwick, Marion	Minneapolis, Minn.
Bourgeois, Elaine M.	Two Rivers, Wis.
Bousley, Dorothy V.	Iron River, Wis.
Brekke, Palmer	Menomonie, Wis.
Brown, Dean T.	Menomonie, Wis.
Brown, Paul R.	Alexandria, Minn.
Christensen, William C.	Neenah, Wis.
Clark, Maxine E.	Menomonie, Wis.
Clausen, Elmer E.	Kenosha, Wis.
Daher, Howard L.	Columbus, Wis.
Dawson, Helen	Cuba City, Wis.
DeBoer, Phyllis A.	Baldwin, Wis.
Engel, Bertrand H.	Madison, Wis.
Engeldinger, Margaret	Durand, Wis.
Enli, Erwin H.	Menomonie, Wis.
Fahling, Owin L.	Cassville, Wis.
Fosdal, Karen	Stoughton, Wis.
Gunderson, Margaret G.	Chippewa Falls, Wis.
Haaya, Thelma M.	Owen, Wis.

Hansen, William C.	Suring, Wis.	Petersen, Marian J.	Weyauwega, Wis.
Hanson, Genevieve M.	Amherst, Wis.	Pollock, Adrian P.	Kenosha, Wis.
Hartung, Frances R.	Arkansaw, Wis.	Pool, Wayne K.	Plymouth, Wis.
Howard, Claude B.	Stanley, Wis.	Pribnow, Betty	Glidden, Wis.
Ingersoll, Walter	Milton, Iowa	Pribnow, Helen E.	Glidden, Wis.
Ives, Mary A.	Menomonie, Wis.	Quilling, Mary Rowe	Menomonie, Wis.
Jens, Grace Harriet	Manitowoc, Wis.	Reynolds, Lester C.	Biwabik, Minn.
Johnson, Irving	Superior, Wis.	Ritter, Robert L.	Kenosha, Wis.
Johnson, Oliver	Superior, Wis.	Roang, John	Stoughton, Wis.
Johnson, Wallace F.	Menomonie, Wis.	Rockwell, Willis A.	Kenosha, Wis.
Keeler, Lewis C.	Shell Lake, Wis.	Roethe, Catherine C.	Fennimore, Wis.
Kees, Donald	Durand, Wis.	Rumsey, Robert C.	Milwaukee, Wis.
Kees, Harold G.	Durand, Wis.	Schaude, Lawrence E.	Oshkosh, Wis.
Kirk, Catherine J.	Menomonie, Wis.	Schrein, Lois G.	Chippewa Falls, Wis.
Krause, Clarence	La Crosse, Wis.	Schultz, Dorothy	Sheboygan, Wis.
Krause, Kathryn C.	Berlin, Wis.	Schultz, Lester	Menomonie, Wis.
Kriz, Edward J.	Milwaukee, Wis.	Schultz, Robert	Menomonie, Wis.
Laatsch, Ruth L.	Milwaukee, Wis.	Scoville, Sidney C.	Kenosha, Wis.
Larson, Chloe E.	Taylor, Wis.	Sedivy, Helen A.	Phillips, Wis.
Lartz, Theodore F.	Suring, Wis.	Sell, Lorraine K.	Glidden, Wis.
Luey, Oliver	Lake Mills, Wis.	Shaneyfelt, William T.	Hastings, Neb.
McClung, Harold C.	Menomonie, Wis.	Sister M. Doris	La Crosse, Wis.
McDonald, Ben	Menomonie, Wis.	Sister M. Telesphore	Milwaukee, Wis.
McGuiness, Mary Helen	Menomonie, Wis.	Sister M. Viterbia	Milwaukee, Wis.
McLeod, Robert P.	Menomonie, Wis.	Skinner, Glyn	Eveleth, Minn.
Maly, Patricia	Saxon, Wis.	Slamen, Jeannette A.	Morris, Minn.
Matz, Dora	Frederic, Wis.	Smith, Helen C.	Menomonie, Wis.
Medtlie, Marlys E.	Menomonie, Wis.	Snoyenbos, Jean L.	Mondovi, Wis.
Milinovich, Nick J.	Carson Lake, Minn.	Solberg, G. James	Elk Mound, Wis.
Miller, Donald V.	Menomonie, Wis.	Sorensen, Stanley D.	Kenosha, Wis.
Miller, Jeanne D.	Cumberland, Wis.	Spreiter, Sherwood G.	Menomonie, Wis.
Mizuha, Bert H.	Mahi, Hawaii	Starck, Freddie C.	Augusta, Wis.
Moldenhauer, Eilert H.	Fall Creek, Wis.	Stukey, Carl W.	Great Falls, Mont.
Morgan, Jean	Whitewater, Wis.	Swanson, Lorraine E.	Washburn, Wis.
Morrison, Rowland W.	Madison, Wis.	Thomas, David E.	Waukegan, Ill.
Naden, Gardner M.	Webster City, Ia.	Treweek, Margaret M.	Rhinelander, Wis.
Nichols, Margaret J.	Whitehall, Wis.	Trusler, Gretchen	Mondovi, Wis.
Nobiensky, Garnett F.	Janesville, Wis.	Turner, Marian	Phillips, Wis.
Norton, Agatha	DePere, Wis.	Tuttle, Doris M.	Oconto Falls, Wis.
Odell, William A.	Eureka, Wis.	Vogtsberger, Irvin G.	Menomonie, Wis.
Olsen, Inez V.	Elcho, Wis.	Voss, William G.	Mountain Iron, Minn.
Olson, Robert C.	Menomonie, Wis.	Watson, Elizabeth J.	Appleton, Wis.
Oosterhous, Dorothy J.	Appleton, Wis.	Watson, Margaret E.	Manitowoc, Wis.
Orvold, Chester R.	Madison, Wis.	Weigler, Martha	Madison, Wis.
Owens, Delmar D.	Knapp, Wis.	Weittenhiller, Ann	Argyle, Wis.
Pederson, Kenneth I.	Superior, Wis.	Wessman, Keijo V.	Superior, Wis.
Petersen, Audrey L.	Webster, Wis.	Westlund, Mae L.	Eau Claire, Wis.

Sophomore Class

Adams, Paul J.	Hibbing, Minn.	Bolduc, Everett	Crandon, Wis.
Alt, George F.	Menomonie, Wis.	Bow, Vivian E.	Menomonie, Wis.
Anderson, Curtis H.	Osseo, Wis.	Breitzman, James,	Menomonie, Wis.
Anderson, Russel E.	Superior, Wis.	Brekke, Annette S.	Menomonie, Wis.
Aumueller, John R.	Menomonie, Wis.	Brenner, Felix W.	Durand, Wis.
Bailey, Paul E.	Menomonie, Wis.	Buethe, Eleanore L.	Olivia, Minn.
Barbo, Ingmar A.	Menomonie, Wis.	Busch, Walter	Downing, Wis.
Barnoske, Charles H.	Ottawa, Ill.	Byrne, Germaine	Antigo, Wis.
Bartelt, Arland W.	Cascade, Wis.	Camerer, Paul	Menomonie, Wis.
Bassler, Gerald F.	Brooklyn, N. Y.	Campbell, William H.	Menomonie, Wis.
Becker, Eleanor R.	LeCenter, Minn.	Carroll, Virginia H.	Superior, Wis.
Beckman, Earl C.	Antigo, Wis.	Case, Mary E.	Menomonie, Wis.
Benn, Marguerite M.	Medford, Wis.	Chamberlin, George H.	Menomonie, Wis.
Berg, Rolf F.	Colfax, Wis.	Chenoweth, Estella J.	Hixton, Wis.
Bergman, Dorothy Z.	Baldwin, Wis.	Clark, Mary	Menomonie, Wis.
Blair, Mary L.	Weyauwega, Wis.	Confer, Howard F.	Menomonie, Wis.
Block, Betty Jane	Woodruff, Wis.	Decker, Lawrence E.	Menomonie, Wis.
Bogaard, Clement F.	Abbotsford, Wis.	Doerfler, Elizabeth Mary	Kimberly, Wis.

Domke, Cecilia M.	Menomonie, Wis.	Morris, Eleanor Ann	Washburn, Wis.
Douglass, Robert	Northwood, Iowa	Muenchow, Geneva M.	Fall Creek, Wis.
Douglas, Scott S.	Baraboo, Wis.	Munson, Sam	Menomonie, Wis.
Dutton, Donovan	Menomonie, Wis.	Naulin, Jean L.	Elm Grove, Wis.
Dreyer, Carol P.	Milwaukee, Wis.	Nogle, Rebecca	Mondovi, Wis.
Ekstrand, Greta E.	Fond du Lac, Wis.	Nothom, Paul C.	Arkansaw, Wis.
Erpenbach, Jerome J.	Elk Mound, Wis.	Olsen, Harlyn R.	Stevens Point, Wis.
Fahling, Ruth E.	Cassville, Wis.	Olsen, Ruth	Janesville, Wis.
Finney, John W.	Menomonie, Wis.	O'Meara, Isabel A.	West DePere, Wis.
Gibson, Margaret I.	Menomonie, Wis.	Orlady, Jean Anne	Menomonie, Wis.
Goeres, Ruth M.	Lodi, Wis.	Otteson, Arthur O.	Stoughton, Wis.
Goto, Hirashi J.	Honolulu, Hawaii	Owen, Vera M.	Elk Mound, Wis.
Govin, Marguerite A.	Menomonie, Wis.	Perry, Ruth M.	Duluth, Minn.
Green, Gracia A.	Menomonie, Wis.	Pagel, Paul V.	Danbury, Wis.
Hagen, Stanely G.	Nashwauk, Minn.	Powers, Edith O.	Menomonie, Wis.
Hansen, Donald E.	Menomonie, Wis.	Quilling, Elizabeth Ann	Menomonie, Wis.
Hanson, La Verne M.	Woodville, Wis.	Ray, Virginia	Menomonie, Wis.
Hawkinson, Gerald B.	Menomonie, Wis.	Redgren, William A.	Menomonie, Wis.
Haworth, Mervin E.	Menomonie, Wis.	Reese, Shirley	Menomonie, Wis.
Hill, Jean R.	Danbury, Wis.	Rene, S. Arvilla	Spooner, Wis.
Hintzman, William W.	Menomonie, Wis.	Richardson, Hortense P.	Milton Jct, Wis.
Hoeppner, Dorothy	Eau Claire, Wis.	Roach, Charlotte E.	Colfax, Wis.
Hollister, Ray	Delavan, Wis.	Roberts, Sarah J.	Union Grove, Wis.
House, Frederick V.	Menomonie, Wis.	Roland, Robert L.	Menomonie, Wis.
Jackson, Marjorie R.	Portage, Wis.	Running, Norman	Menomonie, Wis.
Jaeger, Lorn C.	Menomonie, Wis.	Sand, Beatrice A.	Menomonie, Wis.
Jessel, Merton L.	Elk Mound, Wis.	Schade, Marjorie	Rockford, Ill.
Johnson, Janet M.	Sidney, Mont.	Schaefer, Arnold	Stetsonville, Wis.
Johnson, Orvis L.	Barron, Wis.	Schilling, Clara	Green Bay, Wis.
Joos, Zella Mae	Alma Center, Wis.	Scott, Joyce E.	Menomonie, Wis.
Joshua, Lucille L.	Knapp, Wis.	Sell, George R.	Glidden, Wis.
Kahabka, Bernetta G.	Plum City, Wis.	Shearer, Majesta L.	Menomonie, Wis.
Kennedy, Eugene J.	Rice Lake, Wis.	Sibley, Lela V.	Menomonie, Wis.
King, Margaret A.	Shawano, Wis.	Smith, Myrtle C.	Calamine, Wis.
Kinney, W. Allen	Amery, Wis.	Snell, Carol M.	Elmwood, Wis.
Kirk, E. Louise	Menomonie, Wis.	Snyder, Harold E.	Escanaba, Mich.
Knaack, Herbert	Menomonie, Wis.	Stangl, Joseph H.	Milwaukee, Wis.
Koch, Clinton	Decorah, Ia.	Steinburg, Margaret R.	Cumberland, Wis.
Kraft, Harold G.	Menomonie, Wis.	Stolfo, Leonard A.	Kenosha, Wis.
Kuenzi, Mary Jane	Watertown, Wis.	Stover, Doris E.	Stratford, Wis.
Lamphere, Florian G.	Arkansaw, Wis.	Strese, William	Durand, Wis.
Larson, Ardin V.	Madison, Wis.	Styer, Donald J.	Menomonie, Wis.
Larson, Katherine	Danbury, Wis.	Styer, Lavern L.	Menomonie, Wis.
Larson, Leila R.	Whitehall, Wis.	Swanson, Gyla M.	Luck, Wis.
Leist, Margaret M.	So. Milwaukee, Wis.	Tasker, J. Bruce	Weston, Wis.
Lemke, Darrel C.	Rib Lake, Wis.	Taylor, Helen M.	Spooner, Wis.
Lindgren, Lawrence	Cadott, Wis.	Thompson, Ruth A.	Curtiss, Wis.
Luebke, Viola C.	Watertown, Wis	Tiffany, Herbert	Nelson, Wis.
McGilvray, James	Chippewa Falls, Wis.	Tondryk, Joseph	Milwaukee, Wis.
McKernon, C. Arnold	Elmwood, Wis.	Turner, Marjory	Sidney, Mont.
MacGregor, Donald	Park Falls, Wis.	Tuttle, Ellen E.	Oconto Falls, Wis.
Madden, Lois	Lynd, Minn.	Vaaler, Dorothy E.	La Crosse, Wis.
Martin, W. Kent	Shelby, Mont.	Volp, Lois	Menomonie, Wis.
Martinson, Ralph J.	Menomonie, Wis.	Waller, Lucille M.	Spring Valley, Wis.
Michaels, Slyvia	Alma, Wis.	Webert Loyd J.	Elk Mound, Wis.
Miller, Francis	Menomonie, Wis.	Wierman, John R.	Waldo, Wis.
Miller, Loyd W.	Menomonie, Wis.	Wild, Virginia R.	Elmwood, Wis.
Milnes, Betty R.	Menomonie, Wis.	Will, Robert	Menomonie, Wis.
Mirow, Irene	Wheeler, Wis.	Wilson, David A.	Menomonie, Wis.
Mitzner, Henry W.	Watertown, Wis.	Zeilinger, Lorena M.	Eau Galle, Wis.
Moore, Mary Virginia	Burlington, Wis.		

Freshman Class

Aarness, Oscar	Stanley, Wis.	Anderson, Wilfred	Menomonie, Wis.
Abendschein, Helen	White Lake, Wis.	Arnquist, Betty	New Richmond, Wis.
Ainger, Ethel	Genoa City, Wis.	Atkinson, M. Merle	Beverly Hills, Cal.
Anderson, Chester G.	Superior, Wis.	Bagan, Bernice M.	Menomonie, Wis.
Anderson, Harriette	Baldwin, Wis.	Bakken, Grant	Menomonie, Wis.

Bard, Marjorie	Antigo, Wis.
Barnes, Virginia	Menomonie, Wis.
Barr, Geraldine M.	Glen Haven, Wis.
Baxter, Lillian A.	Menomonie, Wis.
Beaudette, Helene	Menomonie, Wis.
Becraft, Ernest W.	Wausau, Wis
Bensman, Israel	Two Rivers, Wis.
Billiet, Walter E.	Grantsburg, Wis.
Billmayer, Virginia H.	Superior, Wis.
Bitney, Waldron	Bloomer, Wis.
Braum, Jeanne A.	Wauwatosa, Wis.
Brenner, Charles	Eau Galle, Wis.
Bressler, James	Menomonie, Wis.
Brunner, Burdine	Chippewa Falls, Wis.
Bunge, Wilma	Caledonia, Minn.
Burman, Frank	Phelps, Wis.
Burton, Floyd	Downing, Wis.
Carryl, Marion	Menomonie, Wis.
Christiansen, Carl M.	Chippewa Falls, Wis.
Christman, Raymond C.	Flint, Mich.
Clement, Audrey	Menomonie, Wis.
Clementson, Orin	Menomonie, Wis.
Cramer, Neil	Menomonie, Wis.
Crego, Beverly	Menomonie, Wis.
Curtis, Elizabeth	Menomonie, Wis.
DeChiara, Tony	Kenosha, Wis.
DeGrand, Ralph V.	Milwaukee, Wis.
Dehringer, Gordon	Bloomer, Wis.
Dillon, Harriet	Mondovi, Wis.
Dockar, Margaret J.	Menomonie, Wis.
Drake, Robert	Menomonie, Wis.
Ecke, Jane	Eau Claire, Wis.
Edwards, John D.	Menomonie, Wis.
Farner, Lois E.	Colfax, Wis.
Finney, Charles T.	Menomonie, Wis.
Folk, Rose M.	Antigo, Wis.
Formoe, Robert	Menomonie, Wis.
Forester Laverne O.	Menomonie, Wis.
Gibson, Ellen L.	Menomonie, Wis.
Goering, Nelda	Jim Falls, Wis.
Grippen, Edmund	Durand, Wis.
Gullickson, Marian L.	Woodville, Wis.
Halverson, Eugene A.	Menomonie, Wis.
Hansen, Jane	Milwaukee, Wis.
Hasse, Everett C.	Menomonie, Wis.
Herald, Duane A.	Spring Valley, Wis.
Heuser, Ellen A.	Cochrane, Wis.
Hickcox, Virginia D.	Menomonie, Wis.
Higa, Kenichi	Eleele, Hauai, Hawaii
Hill, James A.	Flint, Mich.
Hillman, Lionel E.	Menomonie, Wis.
Hintzman, Donald J.	Menomonie, Wis.
Hoff, Vernon	Mt. Horeb, Wis.
Horman, John R.	Almena, Wis.
Houg, Norman L.	Menomonie, Wis.
Hub, John S.	Milwaukee, Wis.
Jain, Ralph	Elk Mound, Wis.
Jenks, Franklin	Madison, Wis.
Jensen, Elizabeth M.	Shell Lake, Wis.
Jensen, Hans M.	Menomonie, Wis.
Jewett, Roger M.	Chippewa Falls, Wis.
Johns, Margaret A.	Janesville, Wis.
Johnson, Alberta	Red Wing, Minn.
Johnson, Elanor M.	Poskin, Wis.
Johnson, Pearl M.	Menomonie, Wis.
Johnson, Robert J.	Menomonie, Wis.
Johnson, Marjorie	Menomonie, Wis.
Jones, Gwendolyn	Barron, Wis.
Kasmark, Lois E.	Washburn, Wis.
Keith, Robert H.	Menomonie, Wis.
King, Robert C.	Shawano, Wis.
Kinney, Edwin E.	Eau Claire, Wis.
Knight, Margaret L.	Sparta, Wis.
Kohls, Elfrieda	Two Rivers, Wis.
Koss, Edna M.	Casco, Wis.
Lange, Ruth C.	Appleton, Wis.
Lendved, Helen	Menominee, Mich.
Leyhe, Edward F.	Plymouth, Wis.
Lockerby, Jay D.	Bloomer, Wis.
Madsen, Helen	Neenah, Wis.
Maidl, Robert G.	Waseca, Minn.
McLain, Malcolm B.	Wheeler, Wis.
McMahon, Ione K.	Menomonie, Wis.
MacMiller, Ransom A.	Wheeler, Wis.
Meier, Lorayne A.	Menomonie, Wis.
Meittunen, Hazel R.	Soudan, Minn.
Mesken, Mildred Y.	Rice Lake, Wis.
Michelbook, Lawrence	Menomonie, Wis.
Michelbook, Ruth	Menomonie, Wis.
Miller, Charles G.	Menomonie, Wis.
Miller, Robert	Colfax, Wis.
Mitchell, William R.	Knapp, Wis.
Moe, Clifford, J.	Menomonie, Wis.
Morris, Fred W.	Manasquan, N. J.
Morrison, Earl	Menomonie, Wis.
Moskewitz, Jack R.	Eau Claire, Wis.
Murphy, Pat, K.	Menomonie, Wis.
Nelson, Philip B.	Knapp, Wis.
Nelson, Ruth	Menomonie, Wis.
Neubauer, Jerene L.	Menomonie, Wis.
Ney, Jack	Elk Mound, Wis.
Nichols, Betty A.	Whitehall, Wis.
Norman, Rose M.	Manitowoc, Wis.
Ogata, Yoshiharu	Eleele, Kauai, Hawaii
Olson, LaRoy H.	Glen Flora, Wis.
Olson, Stanley V.	Knapp, Wis.
Owens, Lloyd V.	Knapp, Wis.
Pacolt, Marie	Menomonie, Wis.
Perry, June	Mondovi, Wis.
Peterman, James F.	Milwaukee, Wis.
Petryk, Henry R.	Goodman, Wis.
Plater, Steven M.	Eau Claire, Wis.
Plutshack, Robert	Menomonie, Wis.
Radtke, William G.	Rice Lake, Wis.
Raether, Raymond	Fall Creek, Wis.
Rathlesberger, Howard E.	Milwaukee, Wis.
Reese, Dorothea M.	Marshfield, Wis.
Reifenauer, Meltcher	Elk Mound, Wis.
Richter, John G.	Sheboygan, Wis.
Rilling, Charlotte M.	Taylor, Wis.
Rodau, Margaret	Janesville, Wis.
Roethe, Charlotte L.	Fennimore, Wis.
Rogers, Helen H.	Viroqua, Wis.
Rogstad, Arnold L.	Menomonie, Wis.
Roy, Waymeth A.	Sparta, Wis.
Ruedebusch, John W.	Mayville, Wis.
Ruehl, Phillip W.	Milwaukee, Wis.
Sally, Frances M.	Durham, N. D.
Samdahl, Leo	Menomonie, Wis.
Sandow, Douglas G.	Spring Valley, Wis.
Scapple, Francis N.	Menomonie, Wis.
Scheer, Nora A.	Hayward, Wis.
Schneider, Robert C.	Milwaukee, Wis.
Schroeder, James	Appleton, Wis.
Schutz, Herbert D.	Boyceville, Wis.
Schwartz, Paul	Menomonie, Wis.
Score, Leland	Menomonie, Wis.
Scothorn, Dorothy G.	Spring Valley, Minn.
Seitz, Karl K.	Elmwood, Wis.

Smith, Betty E.	Racine, Wis.
Smith, Harold A.	Eau Claire, Wis.
Smith, Robert H.	Elk Mound, Wis.
Snively, James	Menomonie, Wis.
Springer, John G.	Menomonie, Wis.
Steber, Charles G.	Antigo, Wis.
Steckling, Dorothea M.	Merrill, Wis.
Stien, Donald	Stevens Point, Wis.
Strahm, Lois M.	Ladysmith, Wis.
Stratton, Richard H.	Menomonie, Wis.
Strong, Betty	Menomonie, Wis.
Sule, Betty K.	Sparta, Wis.
Tiffany, Janet	Nelson, Wis.
Trezona, Richard J.	Houghton, Mich.
Tylee, Robert L.	Menomonie, Wis.
Weber, Lyle R.	Menomonie, Wis.
Wedekind, Norman J.	Baraboo, Wis.
Wehrwein, Harlan F.	Manitowoc, Wis.
Wernlund, Esther B.	Baldwin, Wis.
Wharton, Marion	Alexandria, Minn.
Whydotski, Lloyd F.	Appleton, Wis.
Willems, Helen P.	West DePere, Wis.
Williams, Dorothy J.	Milwaukee, Wis.
Wischan, Carl A.	Milwaukee, Wis.
Wolbert, Elmo J.	Menomonie, Wis.
Wold, Erbe	Superior, Wis.
Wolf, Bernard	Downsville, Wis.
Wunrow, Carol L.	Beaver Dam, Wis.
Zastrow, Violet S.	Fountain City, Wis.
Ziehl, Reuben	Menomonie, Wis.

Specials

Carley, Velva	Omro, Wis.
Cooke, Harold	Menomonie, Wis.
Dutton, Genevieve	Menomonie, Wis.
Lee, Mahn Kuen	Honolulu, Hawaii
Martin, Robert	Grantsburg, Wis.
Sandin, Robert	Minneapolis, Minn.
Schlumpf, Robert	Durand, Wis.

Index

Administration, Officers of 7
Admission 26
Art (Home Economics) 81
Athletic Field 20
Auditorium 21
Auto Mechanics 95

Biology 75
Board of Regents 5
Building Construction 109
Buildings and Grounds 20

Cabinet Work 102
Cafeteria 25
Calendar 6
Carpentry 103
Chemistry 76
Clothing and Textiles 86
Coaching 72
Cooperative Work (Ind. Ed.) 47
Courses of Study 42
  Industrial Education 42
  Home Economics 53
Credits, Grade Points, and Attendance 29
Curriculum in Home Economics 54
Curriculum in Industrial Education ... 43

Degrees 30
Description of Courses 60
Dormitories (men) 22
Dormitories (women) 21
Drawing 90
  Architectural 92
  Freehand 92
  General 91
  Machine 91

Education and Psychology 60
Electrical 94
Employment (Part-Time) 34
English 66
Enrolling (Regular Session) 36
Expenses (Estimated) 31

Faculty 9
Family Life 88
Fees .....
  Incidental 33
  Infirmary 24
  Library 32
  Shop and Laboratory 32
  School Activities 35
Foods 83
Foundry 96

General Mechanics 94
General Metals 99
Graduate Program 38

Health of Students 24
Historical Information 16
Home Economics 53
  Art 81
  Clothing and Textiles 86
  Family Life 88
  Food and Nutrition 83
  Vocational Home Economics Ed. .. 57
Homemanagement House 24
  (See Family Life) 88

Infimary 24

Library 20
Location 16

Machine Shop 97
Mathematics 69
Mechanics 94
Metal Work 95
Music 70

Nutrition 83

Officers of Administration 7

Painting and Decorating 107
Pattern Making 108
Physical Education 72
Physics 77
Printing 99
Psychology 60
Public Speaking 68

Qualifications for Admission 26

Railroad Connections 16
Refunds 36
Regents, Board of 5
Registration 26
Residence Requirments 30
Rooming Regulations 23, 24, 36
Roster 110

Scholarships 33
Science 75
Self-Support and Student Aid 34
Sheet Metal 98
Shop Work, Drawing and Design 90
Social Sciences 78
Special Students 29
Standardizing College Associations 19
Stout Student Association 35
Student Loan Fund 33
Summer Session (General Information). 37

Table of Contents 3
Teachers (Junior, Senior, and Unclassified)
  Trade and Industrial Subjects 49
  Vocational Home Economics 57
Teaching License 30
Tea Room 25
Textiles 86
Transfer of Records 31
Transferred Credits 28
Tuition—Regular Session 32

Vocational Special Classification
  (Industrial Education) 48
Welding 99
Woodwork 101